

**SEARCH REQUEST FORM**

Scientific and Technical Information Center

Requester's Full Name: Charles Marmor II Examiner #: 74438 Date: 2/13/03  
 Art Unit: 3736 Phone Number 305-3521 Serial Number: 10/000 005  
 Mail Box and Bldg/Room Location: CP2 4D09 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

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Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: \_\_\_\_\_

Inventors (please provide full names): \_\_\_\_\_

Earliest Priority Filing Date: 11/20/00

\*For Sequence Searches Only\* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

*nerve of*  
*from a person (eg, in coma) etc*  
 A procedure that collects, analog waveforms / signals / pulses / impulses  
 → send them to analog digital converter, then to computer that  
 analyzes the waveforms to determine what functions they  
 control, then stores them by function, then sends info to  
 digital-to-analog converter, which then they are  
 reapplied to nerve to cause function to occur.

This is a system to control autonomic nerve functions  
 (may find out also in systems to control peripheral  
 nerve systems).

**STAFF USE ONLY**

Searcher: JEANNE HERRIGAN

Searcher Phone #: 305-5934

Searcher Location: CP2-2008

Date Searcher Picked Up: 2/14

Date Completed: 2/20

Searcher Prep & Review Time: 145

Clerical Prep Time: \_\_\_\_\_

Online Time: 60

**Type of Search**

NA Sequence (#) \_\_\_\_\_

AA Sequence (#) \_\_\_\_\_

Structure (#) \_\_\_\_\_

Bibliographic ☒

Litigation \_\_\_\_\_

Fulltext ☒

Patent Family \_\_\_\_\_

Other \_\_\_\_\_

**Vendors and cost where applicable**

STN \_\_\_\_\_

Dialog \_\_\_\_\_

Questel/Orbit \_\_\_\_\_

Dr.Link \_\_\_\_\_

Lexis/Nexis \_\_\_\_\_

Sequence Systems \_\_\_\_\_

WWW/Internet \_\_\_\_\_

Other (specify) \_\_\_\_\_

File 350:Derwent WPIX 1963-2003/UD,UM &UP=200312

File 347:JAPIO Oct 1976-2002/Oct(Updated 030204)

File 371:French Patents 1961-2002/BOPI 200209

Set	Items	Description
S1	8809	NERVOUS()SYSTEM OR (AUTONOMIC OR PERIPHERAL)()NERV???
S2	97298	WAVE()(SHAPE OR SHAPES OR FORM OR FORMS) OR WAVEFORM? ? OR WAVESHAPE? ?
S3	51436	(ANALOG OR ANALOGUE) (2W) (SIGNAL? ? OR PULSE OR PULSES OR I-MPULSE? ?)
S4	12111	DAC OR DIGITAL(2W)ANALOG()CONVER????.
S5	15326	ANALOG(2W)DIGITAL()CONVER????
S6	1961	ANS OR PNS
S7	22990	NERV???
S8	93275	(ANALOG OR ANALOGUE) AND DIGITAL
S9	959063	CONVERSION? ? OR CONVERT???
S10	53	(S1 OR S6) AND S2:S3
S11	0	S4 AND S5 AND S10
S12	12	S8 AND S10
S13	15	S9 AND S10
S14	9	S12 AND S13
S15	3	S12 NOT S14
S16	143	(S7 AND S2:S3) NOT S10
S17	1882	S4 AND S5
S18	1	S16 AND S17
S19	15	S16 AND S8 AND S9
S20	14	S19 NOT (S18 OR S14 OR S15)

14/26, TI/2 (Item 2 from file: 350)  
DIALOG(R) File 350: Derwent WPIX  
(c) 2003 Thomson Derwent. All rts. reserv.  
013826359

WPI Acc No: 2001-310571/200133  
Hybrid electric power system analysis simulator apparatus has analog simulator and real-time digital simulator synchronized as standard three-phase voltage source of electric power system

14/26, TI/4 (Item 4 from file: 350)  
DIALOG(R) File 350: Derwent WPIX  
(c) 2003 Thomson Derwent. All rts. reserv.  
010486498

WPI Acc No: 1995-387895/199550  
Analogue -to- digital converter - has selective control circuit which changes selection of operating clock signal from several clock signals based on state of supply voltage thereby changing sampling time and successive-approximation time

14/26, TI/5 (Item 5 from file: 350)  
DIALOG(R) File 350: Derwent WPIX  
(c) 2003 Thomson Derwent. All rts. reserv.  
008271365

WPI Acc No: 1990-158366/199021  
Biology teaching simulation signal processing system - has microprocessor for analysing data and analogue - digital converter between processor and probes

14/26, TI/6 (Item 6 from file: 350)  
DIALOG(R) File 350: Derwent WPIX  
(c) 2003 Thomson Derwent. All rts. reserv.  
007332947

WPI Acc No: 1987-329954/198747  
Image processor for laser beam printer - converts input digital image signal to analogue image signal, and generates reference signal  
NoAbstract Dwg 1/4

14/26, TI/7 (Item 7 from file: 350)  
DIALOG(R) File 350: Derwent WPIX  
(c) 2003 Thomson Derwent. All rts. reserv.  
007323773

WPI Acc No: 1987-320780/198745  
Television multiple frame store with cyclical repeat - has read-write memory array for storing image frames and controlled to enable repeated playback of selected frame

14/26, TI/8 (Item 1 from file: 347)  
DIALOG(R) File 347: JAPIO  
(c) 2003 JPO & JAPIO. All rts. reserv.  
06818169

HYBRID ELECTRIC POWER SYSTEM ANALYSIS SIMULATOR

14/26, TI/9 (Item 2 from file: 347)  
DIALOG(R) File 347: JAPIO  
(c) 2003 JPO & JAPIO. All rts. reserv.  
02772430  
METHOD AND APPARATUS FOR MONITORING ANESTHETIC DEPTH

14/7/1 (Item 1 from file: 350)

DIALOG(R) File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

014754713 \*\*Image available\*\*

WPI Acc No: 2002-575417/200261

Diagnosing, monitoring or treating e.g. drugs and toxic substances abuse, alcoholism, or drugs and other substances intoxication, comprises determining Vegetative Nervous System (VNS) strain factors from the VNS state information

Patent Assignee: PULSEGATE OY (PULS-N)

Inventor: ILINE I Z; NAUMOV V A; VIRTANEN T O

Number of Countries: 100 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200254954	A1	20020718	WO 2002FI7	A	20020104	200261 B

Priority Applications (No Type Date): RU 2001100627 A 20010109

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
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WO 200254954	A1	E	45	A61B-005/16	
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Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW

Abstract (Basic): WO 200254954 A1

NOVELTY - A method for diagnosing, monitoring and for use during treatment of drugs and toxic substances abuse, alcoholism, drugs and other substances intoxication, and hormone disorder due to a disease or natural processes in human comprises determining Vegetative Nervous System (VNS) strain factors (VNSSF) from the VNS state information.

DETAILED DESCRIPTION - A method for diagnosing, monitoring and for use during treatment of drugs and toxic substances abuse, alcoholism, drugs and other substances intoxication, and hormone disorder due to a disease or natural processes in humans, comprises:

(a) gathering Vegetative Nervous System (VNS) state information through a non-invasive means from a reference group (RG1) consisting of persons with predetermined absence of drugs and toxic substances abuse, alcoholism, drugs and other substances intoxication and hormone disorder due to a disease or natural processes in human organism, and from a reference group (RG2) consisting of patients with predetermined presence such disorder or state;

(b) determining the VNS strain factors (VNSSF) from the VNS state information, as well as other vascular (cardiovascular) parameters;

(c) determining the VNSSF and/or parameter values bands corresponding to the groups with inherent cutoff values limiting the bands;

(d) comparing of the patient's VNSSF and/or the parameter values against that within the bands of (c), against limiting (cutoff) VNSSF and/or the parameter values of these bands and those of the patients determined earlier; and

(e) diagnosing the patient as belonging at least potentially to RG1 or RG2, or as having increasing or decreasing VNS strain in time.

An INDEPENDENT CLAIM is also included for a non-invasive device for diagnosing, monitoring and for use during treatment of diseases and

states, particularly drugs and toxic substances abuse, alcoholism, drugs and other substances intoxication, and hormone disorders due to a disease or natural processes in human organism. The device comprises:

- (a) a non-invasive means measuring vascular (cardiovascular) parameters characterizing VNS state;
- (b) analysis means for calculating of VNSSF values from the measured vascular (cardiovascular) parameter values;
- (c) analysis means for calculating (determining) VNSSF and/or the parameter value bands corresponding to different measurements series with inherent cutoff values limiting the bands;
- (d) analysis means for comparing of the patient's VNSSF and/or parameter values against those within the bands in (c), and those of the patient's VNSSF and/or parameters value determined earlier; and
- (e) analysis means for diagnosing the patient as corresponding at least potentially to at least one of the measurements series or as having increasing or decreasing VNS strain in time.

USE - The method is useful for monitoring patients' VNS state in treating diseases and state of depression, when these diseases and states are featured by a hormone disorder; evaluating the efficiency of treatment methods and medicines used if this efficiency is indicated by increase or decrease of VNS strain, which is characterized by VNSSF and/or other vascular (cardiovascular) parameters (claimed).

ADVANTAGE - The new method costs less, requires shorter time, and provides absolute values of quantitative results for VNS state estimation.

DESCRIPTION OF DRAWING(S) - The figure depicts a device used for performing the method.

- Non-invasive means measuring vascular (cardiovascular) parameters;
- (1) Amplifying means; (2) Analog -to- digital converting means; (3) Bypassing means; (4) Analysis means for calculating Vegetative Nervous System Strain Factors (VNSSF) value; (5) Analysis means for calculating parameter value bands; (6) Analysis means for comparing patients VNSSF values against those in the bands; (7) Analysis means for calculating VNSSF probabilities of patient's VNSSF to fall within bands calculated in (6); (8) Analysis means for calculating true probabilities of patient's VNSSF to correspond to at least of the bands; (9) Analysis means for comparing patients' VNSSF values against the values determined; (10) DC voltage supply means; (11) Diagnosing means; (12) Computer incorporating (3) and (5)-(12); and (13) USB or Com computer port being DC voltage supply means (14)
- pp; 45 DwgNo 7/7

Derwent Class: B04; P31; T01

International Patent Class (Main): A61B-005/16

International Patent Class (Additional): A61B-005/00; A61B-005/02

14/7/3 (Item 3 from file: 350)  
DIALOG(R) File 350:Derwent WPIX  
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011979729 \*\*Image available\*\*  
WPI Acc No: 1998-396639/199834

Central nervous system treatment - involves stabilisation of brain bio-electric activity with sensor signals

Patent Assignee: MOSC MED ACAD (MOME-R)

Inventor: BADEIKIN A V; LEBEDEVA L I; ORLOVA O R

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
RU 2101037	C1	19980110	RU 96109841	A	19960514	199834 B

Priority Applications (No Type Date): RU 96109841 A 19960514

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
RU 2101037	C1	11		A61N-001/32	

Abstract (Basic): RU 2101037 C

Treatment is based on stabilisation of the brain bio-electric activity by acting on it with the sensor signal. The patient preparation is the same as during normal electro-encephalographic investigations. The electro-encephalographic signal conversion into digital form, signal processing and simulator operation control is carried out by a PC equipped with the suitable dedicated co-processor. The module interface has 32 channels for the input of analogue signals and 4 equivalent output lines for the control of simulator operation. The signal from the electro-encephalograph preliminary amplifiers is fed to the digital processing interface module inputs.

The exchange of signalling and control data between the interface and the PC is carried out via the system interface. During the process of investigations the EEC signals are shown on the display together with the current parameters of the trigger simulation.

USE - For stabilisation of brain bio-electric activity.

ADVANTAGE - Functional condition of the brain can be controlled.

Dwg.1/6

Derwent Class: P31; P34; S05; T01

International Patent Class (Main): A61N-001/32

International Patent Class (Additional): A61B-005/0482

15/26, TI/1 (Item 1 from file: 350)  
DIALOG(R) File 350: Derwent WPIX  
(c) 2003 Thomson Derwent. All rts. reserv.  
012314086

WPI Acc No: 1999-120192/199910  
Arbitrary ratio signal resampling method in digital signal processing -  
involves convolving given sample values of analog signal with values  
of impulse response function of filter

15/26, TI/3 (Item 1 from file: 347)  
DIALOG(R) File 347: JAPIO  
(c) 2003 JPO & JAPIO. All rts. reserv.  
00822748  
ANALOG INPUT DEVICE

15/7/2 (Item 2 from file: 350)  
DIALOG(R) File 350: Derwent WPIX  
(c) 2003 Thomson Derwent. All rts. reserv.  
008890741 \*\*Image available\*\*  
WPI Acc No: 1992-018010/199203

Synchronous telemetry system for implantable medical device - uses  
pulse-position modulation to generate analog and digital data pulses  
relative to sync signals and to displace by different intervals  
Patent Assignee: COOK PACEMAKER CORP (COOK-N)  
Inventor: HENRY D A

Number of Countries: 017 Number of Patents: 007

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 466413	A	19920115	EP 91306123	A	19910705	199203 B
AU 9180402	A	19920116				199213
CA 2046547	A	19920114				199215
US 5137022	A	19920811	US 90553435	A	19900713	199235
US 5241961	A	19930907	US 90553435	A	19900713	199337
			US 92890930	A	19920529	
EP 466413	A3	19930127	EP 91306123	A	19910705	199347
CA 2046547	C	19950214	CA 2046547	A	19910709	199514

Priority Applications (No Type Date): US 90553435 A 19900713; US 92890930 A 19920529

Cited Patents: NoSR.Pub; 3.Jnl.Ref; US 4522208; US 4539992; US 4556063; US 4681111; US 4686990

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 466413	A				
Designated States (Regional): AT BE CH DE ES FR GB GR IT LI LU NL SE					
US 5137022	A		21	A61N-001/37	
US 5241961	A		19	A61N-001/36	Div ex application US 90553435 Div ex patent US 5137022
CA 2046547	C			A61N-001/362	

Abstract (Basic): EP 466413 A

The system is provided for synchronous multiplexed telemetry of  
analog and digital information from an implantable medical device.  
Pulse-position modulation is employed for generating an analog data  
pulse and a digital data pulse relative to the same sync. pulse in a  
number of telemetry sync. pulses. The analog data pulse and  
digital data pulse are displaced from the same sync. pulse by  
different intervals respectively corresp. to the instantaneous value of

an analog input signal and the instantaneous state of a digital input signal. The analog and digital data pulses are transmitted along with the sync pulses to an external device.

USE - For cardiac pacemaker, implantable defibrillator or cardioverter, implantable drug-dispensing device or nervous system sensor. (23pp Dwg.No.1/11)

Abstract (Equivalent): US 5137022 A

Telemetry sync pulses are generated at a 1 kHz rate, and pulse-position modulation is used for generating an analog data pulse and a digital data pulse relative to the same sync pulse and displaced therefrom by different intervals respectively corresp. to the instantaneous value of an analog input signal and the instantaneous state of a digital input signal.

In addition to multiplexing of analog and digital information in a composite bit, multiplexing is provided for dual-channel analog operation.

USE - Synchronous telemetry system for multiplexed telemetry of analog and digital information from a pacemaker or other implantable medical device.

Dwg.1/11

US 5241961 A

A synchronous telemetry receiver and receiving method for reception from an implantable medical device of a PPM signal including a plurality of bits each having a sync. pulse and at least one data pulse of equal amplitude. Capability is provided for restoring correct phase if a sync. pulse is missing or incorrectly received for any reason.

A h.f. clock and counter are provided for counting clock pulses during the time interval between each data pulse and its respective sync. pulse in order to obtain a measurement of the time interval.

ADVANTAGE - Better able to accommodate electrical and physical constraints imposed on implantable devices.

Dwg.7/11

Derwent Class: P34; S05; W05

International Patent Class (Main): A61N-001/36; A61N-001/362; A61N-001/37

International Patent Class (Additional): G01D-005/24; H04B-014/02



20/26, TI/5 (Item 5 from file: 350)  
DIALOG(R) File 350: Derwent WPIX  
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009296173

WPI Acc No: 1992-423583/199251

Nervous - muscle diseases diagnosing device - has output of first amplifier connected to first input of A-D converter with second input to second amplifier

20/26, TI/6 (Item 6 from file: 350)  
DIALOG(R) File 350: Derwent WPIX  
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008805605

WPI Acc No: 1991-309617/199142

A-D converter for implantable medical device - has high frequency oscillator generating clock pulses and gating circuit enabling oscillator for voltage dependent interval

20/26, TI/9 (Item 9 from file: 350)  
DIALOG(R) File 350: Derwent WPIX  
(c) 2003 Thomson Derwent. All rts. reserv.  
004339275

WPI Acc No: 1985-166153/198528

Automatic preparation of analogue signals for electromyography - digitising and processing data to produce histogram and mean and standard deviations

20/26, TI/10 (Item 10 from file: 350)  
DIALOG(R) File 350: Derwent WPIX  
(c) 2003 Thomson Derwent. All rts. reserv.  
004314834

WPI Acc No: 1985-141712/198524

Automatic grading process of living organism muscle potential - using analogue signals from potential sensor and converting to digital signals so that comparison can be made against average group signals

20/26, TI/11 (Item 11 from file: 350)  
DIALOG(R) File 350: Derwent WPIX  
(c) 2003 Thomson Derwent. All rts. reserv.  
001767018

WPI Acc No: 1977-L3533Y/197751

Key telephone system multilink hands free answer circuit - uses common selector to serve all links and has lamp flash signals and ringing signals detector

20/26, TI/12 (Item 1 from file: 347)  
DIALOG(R) File 347: JAPIO  
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07082249

METHOD OF IMAGING AND EQUIPMENT FOR IMAGING

20/26, TI/13 (Item 2 from file: 347)  
DIALOG(R) File 347: JAPIO  
(c) 2003 JPO & JAPIO. All rts. reserv.  
03653561

METHOD AND DEVICE FOR PROCESSING SIGNAL

20/26, TI/14 (Item 3 from file: 347)  
DIALOG(R) File 347: JAPIO  
(c) 2003 JPO & JAPIO. All rts. reserv.  
03428746  
INFORMATION PROCESSING DEVICE AND AIR CONDITIONER USING SAME INFORMATION  
PROCESSING DEVICE

20/7/1 (Item 1 from file: 350)  
DIALOG(R) File 350: Derwent WPIX  
(c) 2003 Thomson Derwent. All rts. reserv.  
013434105 \*\*Image available\*\*  
WPI Acc No: 2000-606048/200058  
Auxiliary utterance equipment for assisting recurrent laryngeal- nerve  
paralytic patients, adds output of filter that removes low frequency  
component, with output of analyzer  
Patent Assignee: GIJUTSU KENKYUKUMIAI IRYO FUKUSHI KIKI (GIJU-N)  
Number of Countries: 001 Number of Patents: 001  
Patent Family:  
Patent No Kind Date Applicat No Kind Date Week  
JP 2000242287 A 20000908 JP 9942454 A 19990222 200058 B  
Priority Applications (No Type Date): JP 9942454 A 19990222  
Patent Details:  
Patent No Kind Lan Pg Main IPC Filing Notes  
JP 2000242287 A 7 G10L-013/00  
Abstract (Basic): JP 2000242287 A

NOVELTY - Filters (11,12) remove low and high frequency components  
from digital audio signal. The removed low and high frequency signals  
are analyzed by an analyzer (20) for predetermined time, based on which  
the output of filter (11) is added with the output of analyzer by an  
adder (14), and is then input to the D/A converter .

DETAILED DESCRIPTION - An A/D converter converts input audio  
signal into digital signal. The converted digital audio signal is  
then processed by a processor (4). The D/A converter converts the  
audio signal input from the processor, into analog signal . An  
amplifier amplifies the analog signal .

USE - For assisting recurrent-laryngeal- nerve paralytic patients.

ADVANTAGE - Voice and loudness of recurrent laryngeal- nerve  
paralytic patients are improved.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of  
auxiliary utterance equipment.

Filters (11,12)

Adder (14)

Analyzer (20)

pp; 7 DwgNo 2/4

Derwent Class: P86; W04

International Patent Class (Main): G10L-013/00

International Patent Class (Additional): G10L-011/00

20/7/2 (Item 2 from file: 350)  
DIALOG(R) File 350: Derwent WPIX  
(c) 2003 Thomson Derwent. All rts. reserv.  
013295178 \*\*Image available\*\*  
WPI Acc No: 2000-467113/200041

Implanted medical apparatus useful as nerve stimulator and pacemaker  
has one or more circuits to carry out at least one function during a  
given time span to reduce power consumption

Patent Assignee: MEDTRONIC INC (MEDT )  
 Inventor: THOMPSON D L  
 Number of Countries: 003 Number of Patents: 006  
 Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
DE 19951489	A1	20000531	DE 1051489	A	19991026	200041 B
FR 2788896	A1	20000728	FR 9913288	A	19991025	200041
US 6324426	B1	20011127	US 9867881	A	19980429	200175
			US 98181517	A	19981028	
			US 2000703166	A	20001031	
US 20020035383	A1	20020321	US 9867881	A	19980429	200224
			US 98181517	A	19981028	
			US 2000703166	A	20001031	
			US 2001962983	A	20010925	
US 6434425	B1	20020813	US 9867881	A	19980429	200255
			US 98181517	A	19981028	
			US 2000703166	A	20001031	
			US 2001962983	A	20010925	
US 6496729	B2	20021217	US 98181517	A	19981028	200307
			US 99359155	A	19990722	

Priority Applications (No Type Date): US 98181517 A 19981028; US 9867881 A 19980429; US 2000703166 A 20001031; US 2001962983 A 20010925; US 99359155 A 19990722

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
DE 19951489	A1		28	A61N-001/365	
FR 2788896	A1			H02J-007/00	
US 6324426	B1			A61N-001/362	CIP of application US 9867881
					Div ex application US 98181517
US 20020035383	A1			A61N-001/36	CIP of application US 9867881
					Div ex application US 98181517
					Div ex application US 2000703166
					Div ex patent US 6324426
US 6434425	B1			A61N-001/362	CIP of application US 9867881
					Div ex application US 98181517
					Div ex application US 2000703166
					Div ex patent US 6324426
US 6496729	B2			A61N-001/362	Div ex application US 98181517

Abstract (Basic): DE 19951489 A1

NOVELTY - An implanted medical apparatus (I), is new and has one or more circuits which can carry out at least one function during a given time span, between two time periods. At least one circuit can perform at least one function in a given number of clock cycles.

DETAILED DESCRIPTION - An implanted medical apparatus (I), is new and has one or more circuits which can carry out at least one function during a given time span, between two time periods. At least one circuit can perform at least one function in a given number of clock cycles. A cycle unit prepares a number of cycle signals in a number of cycle frequencies, so that at least one circuit is controlled at one cycle frequency to perform one function during the whole time span, which is stopped shortly before the following time period.

An INDEPENDENT CLAIM is also included for a method for retaining the performance of a medical apparatus, comprising the provision of one or more circuits which, during the time periods, carry out at least one function in a given number of clock cycles.

USE - (I) is a hermetically sealed medical implant used as a stimulator, a nerve stimulator, a pacemaker, cardioverter,

defibrillator and a pump for medication (claimed).

ADVANTAGE - The structure provides considerable reduction in the consumption of power supply.

DESCRIPTION OF DRAWING(S) - The drawing shows a block diagram of the signal processing stage:

analog signals (499)  
multiplexer (510)  
programmer (512)  
analog / digital converter (516)  
pp; 28 DwgNo 1/11

Derwent Class: B07; P34; S01; S05; T01; W05

International Patent Class (Main): A61N-001/36; A61N-001/362; A61N-001/365; H02J-007/00

International Patent Class (Additional): A61N-001/08; A61N-001/378

20/7/3 (Item 3 from file: 350)

DIALOG(R) File 350:Derwent WPIX

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012894803 \*\*Image available\*\*

WPI Acc No: 2000-066638/200006

Sensation stimulating component generator for human sensory nerve - has amplifier that receives digital audio signal transformed to analog signal by digital -to- analog converter to make speaker output converted audio signal, if power supply switch is turned ON

Patent Assignee: ACE DENKEN KK (ACED-N)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 11319100	A	19991124	JP 98125874	A	19980508	200006 B

Priority Applications (No Type Date): JP 98125874 A 19980508

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
JP 11319100	A	14	A61M-021/00	

Abstract (Basic): JP 11319100 A

NOVELTY - An amplifier receives the digital audio signal transformed to analog signal by a digital -to- analog converter to make a speaker (123) output the converted audio signal, if a power supply switch (124) is turned ON. A voice controller reads the audio data chosen through a mode selector switch (13). DETAILED DESCRIPTION - A main body (11), hanging on a string (18), has a voice generating circuit, a mode selector switch (13) and a power supply (14). A memory stores various recorded data for gamma and theta wave induction.

USE - For human sensory nerve .

ADVANTAGE - Offers portable sensation stimulating component generator. Improves versatility of sensation stimulating component generator. Ensures efficient mind and body conditioning. Obtains cerebral activation of hearing or reading. DESCRIPTION OF DRAWING(S) - The figure shows the sectional view of a sensation stimulating component generator. (11) Main body; (13) Mode selector switch; (14) Power supply; (18) String; (123) Speaker; (124) Power supply switch.

Dwg.1/15

Derwent Class: P34; S05; U23; W04

International Patent Class (Main): A61M-021/00

20/7/4 (Item 4 from file: 350)

DIALOG(R) File 350:Derwent WPIX

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File 348:EUROPEAN PATENTS 1978-2003/Feb W02

File 349:PCT FULLTEXT 1979-2002/UB=20030213,UT=20030123

Set	Items	Description
S1	22904	NERVOUS()SYSTEM OR (AUTONOMIC OR PERIPHERAL)()NERV???
S2	51042	WAVE() (SHAPE OR SHAPES OR FORM OR FORMS) OR WAVEFORM? ? OR WAVESHAPE? ?
S3	40503	(ANALOG OR ANALOGUE) (2W) (SIGNAL? ? OR PULSE OR PULSES OR IMPULSE? ?)
S4	16855	DAC OR DIGITAL (2W)ANALOG()CONVER????
S5	23945	ANALOG (2W)DIGITAL()CONVER????
S6	10596	ANS OR PNS
S7	48301	NERV???
S8	89438	DIGITAL AND (ANALOG OR ANALOGUE)
S9	378899	CONVERT??? OR CONVERSION? ?
S10	0	(S1OR S6) (S)S2:S3
S11	42	(S10 OR S6) (S)S2:S3
S12	127	(S1 OR S6) (S)S2:S3
S13	0	S12(S)S4(S)S5
S14	15	S12(S)S8(S)S9

14/6/1 (Item 1 from file: 348)

01148069

METHOD FOR INCREASING INTERFERENCE IMMUNITY WHEN RECEIVING SIGNALS FROM  
SATELLITE NAVIGATION SYSTEMS AND DEVICE FOR REALISING THE SAME

LANGUAGE (Publication,Procedural,Application): English; English; Russian

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200035	2081
SPEC A	(English)	200035	4289
Total word count - document A			6370
Total word count - document B			0
Total word count - documents A + B			6370

14/6/2 (Item 2 from file: 348)

00473417

Decision feedback equalizer

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF1	389
CLAIMS B	(English)	EPAB96	398
CLAIMS B	(German)	EPAB96	369
CLAIMS B	(French)	EPAB96	500
SPEC A	(English)	EPABF1	3221
SPEC B	(English)	EPAB96	3321
Total word count - document A			3610
Total word count - document B			4588
Total word count - documents A + B			8198

14/6/3 (Item 1 from file: 349)

00902213 \*\*Image available\*\*

MAGNETIC INK CHARACTER RECOGNITION USING A DUAL GAP READ HEAD

Publication Language: English

Filing Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 4277

Publication Year: 2002

14/6/4 (Item 2 from file: 349)

00844585 \*\*Image available\*\*

UPSTREAM DATA TRANSMISSION

Publication Language: English

Filing Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 6092

Publication Year: 2001

14/6/5 (Item 3 from file: 349)

00832356

MODULATORS OF THE ENDOCANNABINOID UPTAKE AND OF THE VALLINOID RECEPTORS

Publication Language: English

Filing Language: English

Fulltext Availability:

Detailed Description  
Claims  
Fulltext Word Count: 19160  
Publication Year: 2001

14/6/7 (Item 5 from file: 349)  
00749027 \*\*Image available\*\*  
UNIVERSAL SYNCHRONOUS NETWORK SYSTEM FOR INTERNET PROCESSOR AND WEB  
OPERATING ENVIRONMENT  
Publication Language: English  
Filing Language: English  
Fulltext Availability:  
Detailed Description  
Claims  
Fulltext Word Count: 97387  
Publication Year: 2000

14/6/8 (Item 6 from file: 349)  
00552746 \*\*Image available\*\*  
METHOD FOR INCREASING INTERFERENCE IMMUNITY WHEN RECEIVING SIGNALS FROM  
SATELLITE NAVIGATION SYSTEMS AND DEVICE FOR REALISING THE SAME  
Publication Language: Russian  
Publication Year: 2000

14/6/9 (Item 7 from file: 349)  
00500168 \*\*Image available\*\*  
A PLANT AND A METHOD IN CONNECTION THEREWITH  
Publication Language: English  
Fulltext Availability:  
Detailed Description  
Claims  
Fulltext Word Count: 13552  
Publication Year: 1999

14/6/11 (Item 9 from file: 349)  
00459165 \*\*Image available\*\*  
UNIVERSAL EPISTEMOLOGICAL MACHINE (A.K.A. ANDROID)  
Publication Language: English  
Fulltext Availability:  
Detailed Description  
Claims  
Fulltext Word Count: 265553  
Publication Year: 1998

14/6/13 (Item 11 from file: 349)  
00280289 \*\*Image available\*\*  
BANDWIDTH SAMPLING TECHNIQUE FOR DIGITAL FOCUSING IN ARRAY IMAGING SYSTEMS  
Publication Language: English  
Fulltext Availability:  
Detailed Description  
Claims  
Fulltext Word Count: 6290  
Publication Year: 1994

14/6/14 (Item 12 from file: 349)  
00231449  
DEVICE FOR COMPUTER-ASSISTED MONITORING OF THE BODY

Publication Language: English  
Fulltext Availability:  
Detailed Description  
Claims  
Fulltext Word Count: 11041  
Publication Year: 1993

14/6/15 (Item 13 from file: 349)  
00100290

FDM/TDM TRANSMULTIPLEXER  
Publication Language: English  
Fulltext Availability:  
Detailed Description  
Claims

Fulltext Word Count: 12433  
Publication Year: 1979  
?t14/3,k/6,10,12

14/3,K/6 (Item 4 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00786147 \*\*Image available\*\*

COCHLEAR IMPLANT  
IMPLANT COCHLEAIRE

Patent Applicant/Assignee:

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(Nationality), (For all designated states except: US)

Patent Applicant/Inventor:

PEETERS Stefaan, Rozenlaan, 29, B-2970 's Gravenwezel, BE, BE (Residence)  
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Patent and Priority Information (Country, Number, Date):

Patent: WO 200119304 A1 20010322 (WO 0119304)  
Application: WO 2000BE109 20000918 (PCT/WO BE0000109)  
Priority Application: BE 99621 19990916

Designated States: AE AG AL AM AT AT (utility model) AU AZ BA BB BG BR BY  
BZ CA CH CN CR CU CZ CZ (utility model) DE DE (utility model) DK DK  
(utility model) DM DZ EE EE (utility model) ES FI FI (utility model) GB  
GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KR (utility model) KZ LC LK  
LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK  
SK (utility model) SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE  
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 11155

Fulltext Availability:

Claims

Claim

... a

signal processor, having a set of audio channel units and being provided  
for the conversion of sound signals, according to a frequency related  
tonotopic division, each audio channel being provided...

...provided for temporarily storing said sampled signal



values, said storage buffer being connected with a waveform generator comprising at least one stimulation channel, said waveform generator and said storage buffer being connected to a read signal generator, provided for generating read signals enabling to read the stored sampled signal values from said storage buffer, said waveform generator being provided for retrieving under control of said read signal, said sampled signal values...

...audio channel from said storage buffer and for generating based on said sampled signal values waveforms having a time period and a wave pattern, said waveform generator being provided for stimulating by means of said waveforms electrode contacts of said cochlear implant.

A cochlear implant is well known and is used...

...possible to create auditory sensation, by generating electric field gradients in the area of the peripheral nerve fibres of the auditory nerve bundle. This bundle contains approximately 30,000 individual afferent nerve...

...approximately 4,500 internal hair cells. The sound signals are picked up by a microphone, converted into digital signals, and processed by the signal

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processor in order to activate different stimulation...

...due to the different timings in writing by the signal processor and reading by the waveform generator, the buffer is implemented as a temporal peak hold storage.

A drawback of the...each stimulation channel remains stored in the storage buffer until it is retrieved by the waveform generator.

In order to carry through the best possible conversion of the stored sampled signal values, into current or voltage stimulation waveforms for the N different stimulation channels, it is necessary to determine a suitable stimulation strategy...

...signal processor having a set of N audio channel units and being provided for the conversion, according to a frequency related tonotopic division, of sound signals, each audio channel being provided...

...electrode contacts, to each stimulation channel a memory element is assigned, provided for storing a waveform pattern and a wave duration according to and during which an intensity value determined on...makes it possible to establish specific stimulation channel configurations and specific stimulation intensity values and waveforms for each patient and store them.

A second preferred embodiment of a cochlear implant according...

...manner, that the time frame of the assigned group is at least equal to the waveform duration of the stimulation channel within the considered group having the largest waveform duration. An efficient time sharing is thus obtained.

The invention will now be described in...

...schematic representation of the processing of the sound signal processor, as well as a multichannel waveform generator;

figure 4 shows an example of a signal processing of the sound signal;  
figure...

- ...electrode contact configurations defined by the stimulation configuration unit;  
figure 7 shows examples of various waveforms used for stimulation;  
figure 8 shows examples of CAP I/O functions for different stimulation...an illustration of simultaneous and non simultaneous stimulation;  
figure 19 shows an example of the conversion from amplitude value from data buffer to stimulation intensity for a stimulation channel;  
figure 20...
- ...a microphone's or auxiliary input 1 for receiving a second signal. The signal processor converts , by means of an A/D converter , the analog sound signal picked up by microphone, first into a digital signal, which is then converted into a sequence of N electrical signals, according to a frequency related tonotopic division. The signal processor is connected to a waveform generator 3 which is also connected to a series of M ( $M > 1$ ) electrode contacts...
- ...the Basilar membrane (BM) with the organ of Corti, play a crucial role in the conversion of the sound evoked mechanical movement to action potentials. The Basilar membrane performs a (non 2. In case of malfunctioning of the mechanical to electrical conversion of the cochlea, this frequency-based tonotopy can be imitated by electrically activating electrode surfaces...
- ...picked up by the input devices. It also gives a schematic representation of the multichannel waveform generator 3 with its R ( $R > 1$ ) stimulation io channels and, which determines the stimulation strategy. After analog to digital conversion (10), the signal to noise ratio (S/N) of the signal is improved and information...
- ...taking in account the normal masking curves of the auditory system (1 1). The electrical analog of the acoustic signal is split up into N 15 audio channels. Non linear filters...
- ...14). The way in which this information supplied by audio channels is processed by the waveform generator and passed to its stimulation channels, in order to stimulate various groups of nerve fibres is referred to as stimulation strategy. The waveform generator contains both patient-dependent (1 5) and patient-independent (1 6) data for processing...is stored in the storage buffer under control of a read signal generated by the waveform , each time after that a sampled signal value is read from the storage buffer 24...
- ...is linked (by means of a channel mapping function) to a stimulation channel of the waveform generator 26,

which includes stimulation channels to which electrode contacts are attributed by the...

...channel

mapping function connects each audio channel to one or more stimulation channels.

Consequently, the analog input signal undergoes various processes, performed by the signal processor, in order to generate signal values for...

...channels to be activated. Since this involves fluctuating signals, these audio channel outputs show a waveform with amplitude maxima and minima. In order to prevent losing important amplitude information related to...signal generator gives a new sampled value at one of the audio channels outputs. The waveform generator reads the stored values on request from stimulation channels. When reading a stored value...

...between successive readings.

The signal values saved in the storage buffer are read by the waveform generator unit 26 under control of its own sampling unit 28

generating sampling signals fw...

...writing, and the

storage buffer, make it possible to unlink the speech processing from the waveform generator and his stimulation strategy and allows to combine in an easy way different signal processing systems with different stimulation strategies.

The waveform generator controls the translation of the values stored in the storage buffer 24 to stimulation patterns at the level

of the multi-surface-contact electrode. For this purpose, the waveform generator unit 26 constructs a series of R stimulation channels, taking into account patient-dependent...at the different contacts involved in this stimulation channel.

Each stimulation channel possesses its stimulation waveform pattern and waveform duration or time period. This waveform controls the instantaneous values of the current sources and or voltage sources associated with the...

...controlling value of this stimulation

channel is multiplied with the instantaneous value of the normalised waveform (max value is 1).

While stimulating the average injected current through each contact surface of...

...go to zero over time. One way to

obtain this is by selecting charge-balanced waveforms . In case of charge

unbalanced waveforms , like single monophasic pulse, the output signal from the audio channel should be a pure...

...component, compensating cycle

should be inserted to balance net charge to zero over time.

Any waveform is possible. Each waveform is characterised

by its shape and time pattern. Figure 7 shows different shapes such as...

...interval (d) etc. For a variety of reasons, each stimulation channel can have a different waveform and waveform timing.

For example the asymmetric pulse can be used to improve the selectivity of bipolar stimulation in one stimulation channel when a charged balanced waveform with time gab can be used to avoid blocking the action potentials in an other...

...the signal processor, becomes more and more obscure. The way the signal processor and waveform generator handle the incoming signal primarily determines the MCL level for sound signals passing through...

14/3,K/10 (Item 8 from file: 349)

DIALOG(R) File 349:PCT FULLTEXT

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00478113 \*\*Image available\*\*

INTERACTIVE COMPUTER SYSTEM

SYSTEME INFORMATIQUE INTERACTIF

Patent Applicant/Assignee:

FULLER RESEARCH CORPORATION,

Inventor(s):

FULLER Terry A,

REID Aarne H,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9909465 A1 19990225

Application: WO 98US12733 19980618 (PCT/WO US9812733)

Priority Application: US 97911752 19970815

Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES

FI GB GE GH HU IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN

MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN GH GM

KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI

FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG

Publication Language: English

Fulltext Word Count: 6099

Fulltext Availability:

Detailed Description

Detailed Description

... suitable for computer 12. The conditioning of the signals may consist of amplifying, filtering, and converting analog signals to digital signals. In the embodiment in Figure 1, the interface 24 receives analog signals from sensors 26, 28, 30, and 32 and amplifies, filters, and converts the analog signals to digital signals. The digital signals are then transmitted by interface device 24 to computer 12.

In another embodiment, each...nervous system responses of a user to a given stimulus (block 50). The sensors generate analog signals representative of the detected autonomic nervous system responses and transmit the analog signals to interface device 24 (block 56). The interface device 24 converts the analog signal transmitted by the sensors to digital signals (block 58). Thereafter, the interface 24 transmits the digital signals to the computer 12 (block 60). At the same time, the keyboard 14, mouse...

...18 detect the user's voluntary input (block 52) and transmit the detected input as digital signals to computer 12 (block 54).

Once the digital signals transmitted by interface device 24...device 24 is illustrated in Figure

5. Transducer inputs 100, 102, and 104 receive the analog signals from the autonomic nervous system sensors. Interface device 24 may, of course, have any number and variety of transducer inputs, and is not limited to three inputs. Analog signal conditioner 106 amplifies and filters the analog signals received by transducer inputs 100, 102, and 104. Microcontroller 108 receives the amplified and filtered analog signals from analog signal conditioner 106 and converts the analog signals to digital signals. RC oscillator 110 controls the timing of microcontroller 108. After the analog signals are

converted to digital signals, microcontroller 108 transmits the digital signals to the computer via octal switch...are transmitted to interface device 214 as analog signals. Interface device 214 converts the received analog signals into digital signals and sends the first digital signals to computer 202. Computer 202 interprets the first digital signals representing the detected autonomic nervous system responses of the user and transmits a second digital signal containing an output command to computer 232.  
Computers 202 and 232 are connected by

14/3,K/12 (Item 10 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00371723 \*\*Image available\*\*  
COMMUNICATIONS METHOD AND APPARATUS FOR DIGITAL INFORMATION  
PROCEDE ET APPAREIL DE COMMUNICATION DESTINES A DES INFORMATIONS NUMERIQUES  
Patent Applicant/Assignee:  
JOHNSON Neldon P,  
Inventor(s):  
JOHNSON Neldon P,  
Patent and Priority Information (Country, Number, Date):  
Patent: WO 9712465 A1 19970403  
Application: WO 96US5539 19960423 (PCT/WO US9605539)  
Priority Application: US 95533618 19950926; US 96628280 19960405  
Designated States: AL AM AU BB BG BR CA CN CZ DE EE FI GE HU IS JP KP KR LK  
LR LT LV MD MG MK MN MX NO NZ PL RO SG SI SK TR TT UA UZ VN KE LS MW SD  
SZ UG AM AZ BY KG KZ MD RU TJ TM AT BE CH DE DK ES FI FR GB GR IE IT LU  
MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG  
Publication Language: English  
Fulltext Word Count: 67709  
Fulltext Availability:  
Claims  
Claim

... 99 further

comprising a sample hold and signal reconstruct circuit which re-synthesizes the received analog information wave from the separated and filtered fundamental frequency wave and harmonics,

102, An apparatus as claimed in Claim 99 further comprising one or more analog to digital convertors for converting the separated and filtered fundamental frequency wave and harmonics of information waves received to digital ,

103. An apparatus as claimed in claim 99 further comprising one or more analog to digital convertors for converting the separated and filtered fundamental frequency wave and harmonics of information waves received to digital and an output signal generator for generating an output digital signal with a magnitude which is a function of the amplitude and phase of the...

...ARTICLE 19)

105. An apparatus as claimed in claim 99 further comprising one or more analog to digital convertors for converting the separated and filtered fundamental frequency wave and harmonics of information waves received to digital , an output signal generator for generating an output digital signal with a magnitude which is a function of the amplitude and phase of the...

...wave and harmonics of  
the information wave, and a buffer circuit for transmitting  
the output digital signal from selected time slots to the  
-0 address storage circuit to update the time slot allocations.

.5

!0

:5

AMENDED SHEET (ARTICLE 19)

106, An apparatus for receiving an analog signal  
comprised of a series of information waves, each information  
wave being received in an allocated...106 further  
comprising a sample hold and signal reconstruct circuit  
which re-synthesizes the received analog information wave  
from the separated and filtered fundamental frequency wave  
and harmonics,

109, An apparatus as claimed in Claim 106 further  
comprising one or more analog to digital convertors for  
converting the separated and filtered fundamental frequency  
wave and harmonics of information waves received to digital .

110. An apparatus as claimed in claim 106 further  
comprising one or more analog to digital convertors for  
converting the separated and filtered fundamental frequency  
wave and harmonics of information waves received to digital  
and an output signal generator for generating an output  
digital signal with a magnitude which is a function of the  
amplitude and phase of the...

...ARTICLE 19)

112, An apparatus as claimed in Claim 106 further  
comprising one or more analog to digital convertors for  
converting the separated and filtered fundamental frequency  
wave and harmonics of information waves received to digital ,  
an output signal generator for generating an output digital  
signal with a magnitude which is a function of the amplitude  
and phase of the...

...wave and harmonics of  
the information wave, and a buffer circuit for transmitting  
the output digital signal from selected time slots to the  
address storage circuit to update the time slot allocations.

1 5

AMENDED SHEET (ARTICLE 19)

113, An apparatus for receiving an analog signal  
comprised of a series of information waves, each information  
wave being received in an allocated...wave and each of the harmonics of  
each received information  
wave;

j) one or more analog to digital convertors for  
converting the separated and filtered fundamental frequency  
wave and harmonics of information waves received to digital ;  
and

AMENDED SHEET (ARTICLE 19)

k) an output signal generator for generating an  
output digital signal with a magnitude which is a function  
of the amplitude and phase of the...

...113 further

comprising a sample hold and signal reconstruct circuit  
which re-synthesizes the received analog information wave  
from the separated and filtered fundamental frequency wave

and harmonics,

115. An apparatus as claimed in Claim 113 further comprising a buffer circuit for transmitting the output digital signal from selected time slots to the address storage circuit to update the time slot...

...the reference components as received.

AMENDED SHEET (ARTICLE 19)

117. An apparatus for receiving an analog signal comprised of a series of information waves, each information wave being received in an allocated...wave and each of the harmonics of each received information wave,

j) one or more analog to digital convertors for converting the separated and filtered fundamental frequency wave and harmonics of information waves received to digital ;

AIENULD SSHEFE (ART I CLE 1 9)

and

k) an output signal generator for generating an output digital signal with a magnitude which is a function of the amplitude and phase of the...

...117 further

comprising a sample hold and signal reconstruct circuit which re-synthesizes the received analog information wave from the separated and filtered fundamental frequency wave and harmonics.

119. An apparatus as claimed in Claim 117 further comprising a buffer circuit for transmitting the output digital signal from selected time slots to the address storage circuit to update the time slot...

...the reference components as received.

AMENDED SHEET (ARTICLE 19)

121. An apparatus for receiving an analog signal comprised of a series of information waves, each information wave being received in an allocated...filter operations;

i) a sample hold and signal reconstruct circuit which re-synthesizes the received analog information wave from the separated and filtered fundamental frequency wave and harmonics;

j) a plurality...

...peak detector being connected

in parallel with the positive peak detectors;

l) a plurality of analog to digital convertors for converting the peak positive and peak negative amplitudes to digital ; and

m) an output signal generator for generating an output digital signal based upon the digital values of the positive and negative peaks,

122. An apparatus as claim in Claim 121 further comprising a buffer circuit for transmitting the output digital signal from selected ...Ni!, E N D ELD Ss@IHET (ARTICLE 19)

124. An apparatus for separating an analog information wave synthesized from a combination of a fundamental frequency wave and a finite number...

...a filter circuit.

AN", EN "DIED SHEET (ARTICLE 19)

125. An apparatus for separating an analog information wave synthesized from a combination of a fundamental frequency wave and a finite number...

...with a narrow bandpass filter.

2 5

AMENDED SHEET (ARTICLE 19)

126. An apparatus for digital information transfer comprising:

a) means for generating repetitive synchronizing waves of a pre-set wave form and frequency;  
b) means for allocating one or more source digital signals to unique repetitive time slots, a synchronizing wave being generated in each time slot, the time slot allocated to each source digital signal being cycled at a selected frequency;

c) means for generating an analog information wave for each said source digital signal, each said information wave being of a pre-selected wave form and frequency, said information wave frequency being distinct from the frequency of the synchronizing waves...

...amplitude of each information wave being a function of the magnitude of the corresponding source digital signal as measured during the allocated time slot for the signal;

d) means for transmitting each analog information wave and each corresponding synchronizing wave within the time slot allocated to them;

e) means for receiving each analog information wave and each corresponding synchronizing wave within the time slot allocated to them;

f) means for determining the amplitudes of each analog information wave and each corresponding synchronizing wave received during the time slot allocated to them;

g) means for generating an output digital signal for each information wave received during its allocated time

slot, said output digital signal having a digital magnitude

which is a function of the amplitude of the corresponding received information wave; and

h) means for calibrating each output digital signal by comparison of the amplitude of the corresponding synchronizing wave as received with its...

...apparatus as claimed in Claim 126 wherein

the means for allocating one or more source digital signals to unique, repetitive time slots, includes a means for allocating a plurality of source digital signals to each time slot, and wherein the means for generating an analog information wave for each said source digital signal includes a means for generating an information wave with a distinct pre-selected frequency for each of the plurality of source digital signals allocated to each time slot, and wherein the means for transmitting each of the analog information waves within its allocated time slot includes a means for transmitting the plurality of...

...at pre-selected and distinct

frequencies, and wherein the means for receiving each of the



analog information waves within its allocated time slot includes a means for receiving the plurality of...

...at the pre-selected

frequencies, and wherein the means for determining the amplitude of each analog information wave and each corresponding synchronizing wave received during their allocated time slot includes a...

...waves received at

the pre-selected frequencies, and wherein the means for generating an output digital signal for each information wave received during its allocated time slot includes a means for generating an output digital signal for each of the plurality of information waves received during each time slot, and wherein the means for calibrating each output SHEET (ARTICLE 19)

digital signal includes a means for calibrating each of the output digital signals for the plurality of information waves received by comparison of the amplitude of the...

...apparatus as claimed in Claim 126 wherein

the means for allocating one or more source digital signals to unique repetitive time slots, the means for generating an analog information wave for each said source digital signal, and the means for transmitting each analog information wave and each corresponding synchronizing wave within the time slot allocated to them are...

...locations.

129. An apparatus as claimed in Claim 126 wherein the means for receiving each analog information wave and each corresponding synchronizing wave within the time slot allocated to them, the means for determining the amplitudes of each analog information wave and each corresponding synchronizing wave received during the time slot allocated to them, the means for generating an output digital signal for each information wave received during its allocated time slot, and the means for calibrating each output digital -25 signal by comparison of the amplitude of the corresponding synchronizing wave as received with...

...at a plurality of receiving locations.

M, .VNJDED SHEIT (ARTICLE 19)

130. An apparatus for digital information transfer comprising:

- a) means for generating repetitive synchronizing waves of a pre-set wave form and frequency;
- b) means for transmitting the synchronizing waves to one or more remote transmission...

...at

each of the remote transmission locations;

d) means for allocating one or more source

digital signals to unique repetitive time slots, a synchronizing wave being generated in each time slot, the time slot allocated to each source digital signal being cycled at a selected frequency;

e) means for generating an analog information

.5 wave for each said source digital signal, each said information wave being of a pre-selected wave form and frequency, said information wave frequency being distinct

from the frequency of the synchronizing waves...

...amplitude of each information wave being a function of the magnitude of the corresponding source digital signal as measured during the allocated time slot for the signal;

f) means for transmitting each analog information wave and each corresponding synchronizing wave within the time slot allocated to them;

g) means for receiving at one or more receiving locations each analog information wave and each corresponding synchronizing wave within the time slot allocated to them;

ANAIENDIM CoHEET (ARTICLE 19)

h) means for determining the amplitudes of each analog information wave and each corresponding synchronizing wave received during the time slot allocated to them;

i) means for generating an output digital signal for each information wave received during its allocated time slot, said output digital signal having a digital magnitude which is a function of the amplitude of the corresponding received information wave; and

j) means for calibrating each output digital @O signal by comparison of the amplitude of the corresponding synchronizing wave as received with...

...apparatus as claimed in Claim 130 wherein the means for allocating one or more source digital signals to unique, repetitive time slots, includes a means for allocating a plurality of source digital signals to each time slot, and wherein the means for generating an analog information wave for each said source digital signal includes a means for generating an information wave with a distinct pre-selected frequency for each of the plurality of source digital signals allocated to each time slot, and wherein the means for transmitting each of the analog information ...pre-selected and distinct frequencies, and wherein the means for receiving each of the is analog information waves within its allocated time slot includes a means for receiving the plurality of...

...at the pre-selected frequencies, and wherein the means for determining the amplitude of each analog information wave and each corresponding synchronizing wave received during their allocated time slot includes a...

...waves received at the pre-selected frequencies, and wherein the means for generating an output digital signal for each information wave received during its allocated time slot includes a means for generating an output digital signal for each of the plurality of information waves received during each time slot, and wherein the means for calibrating each output

AMENDED SHEET (ARTICLE 19)

- 297

digital signal includes a means for calibrating each of the output digital signals for the plurality of information waves received by comparison of the amplitude of the...

...received with its known amplitude as transmitted,

L

SHEET (ARTICLE 19)

132. An apparatus for digital information transfer comprising:

a) means for generating repetitive synchronizing waves of a pre-set wave form and frequency;

b) means for allocating one or more source

digital signals to unique repetitive time slots, a synchronizing wave being generated in each time slot, the time slot allocated to each source digital signal being cycled at a selected frequency;

c) means for generating an analog information wave for each said source digital signal, each said information wave being of a pre-selected wave form and frequency, said information wave frequency being distinct from the frequency of the synchronizing waves...

...amplitude

of the synchronizing wave being a function of the magnitude of the corresponding source digital signal as measured during the allocated time slot for the signal;

d) means for trans...

010962397     \*\*Image available\*\*

WPI Acc No: 1996-459346/199646

Pulse wave measuring device for inspection of medical autonomous nerve e.g. heart - has CPU which receives digitised pulse wave signal from A/D converter and computes electrocardiogram space to obtain peak value and peak time of pulse wave

Patent Assignee: SEKISUI CHEM IND CO LTD (SEKI )

Number of Countries: 001    Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 8229013	A	19960910	JP 9542939	A	19950302	199646 B

Priority Applications (No Type Date): JP 9542939 A 19950302

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
JP 8229013	A	5	A61B-005/0245	

Abstract (Basic): JP 8229013 A

The device has a pulse wave sensor (1) which outputs an analogue signal corresp. to the detected state of the pulse wave. An A/D converter (5) digitises the detected analogue signal of the sensor.

The digitised signal is received at predetermined cycle by a CPU (9) which then computes the electrocardiogram space to obtain the peak value and peak time of the pulse wave.

ADVANTAGE - Easily obtains standard deviation of electrocardiogram space. Provides high speed pulse wave transmission into body almost simultaneous with heart beat. Offers simple and inexpensive device.

Dwg.1/4

Derwent Class: P31; S05

International Patent Class (Main): A61B-005/0245

20/7/7        (Item 7 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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008696278     \*\*Image available\*\*

WPI Acc No: 1991-200299/199127

Electroencephalic neuro feed-back appts. - includes method for bioelectrical frequency inhibition and facilitation

Patent Assignee: AYERS M A (AYER-I)

Inventor: AYERS M A

Number of Countries: 001    Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5024235	A	19910618	US 90484824	A	19900226	199127 B

Priority Applications (No Type Date): US 90484824 A 19900226

Abstract (Basic): US 5024235 A

The method and appts. is for displaying and either inhibiting or promoting selected bioelectrical frequencies emitted by a living organism. The method includes the steps of detecting an analog bioelectrical signal, converting the signal to discrete digital signals representing corresponding frequencies and numerically analysing the digital signals to determine the different bioelectrical frequencies emitted by the organism. Furthermore, a threshold amplitude associated with a selected digital signal can be established an auditory or visual signal can be sent to the organism to indicate whether the bioelectrical frequency under study is within or outside the threshold amplitude. With this information the organism can be taught to inhibit or facilitate the bioelectrical frequency.

18/7/1 (Item 1 from file: 350)  
DIALOG(R) File 350:Derwent WPIX  
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003105968

WPI Acc No: 1981-L6016D/198145

Medical investigation data processing unit - has logic stimuli registers,  
decoders connected to electrodes with outputs taken to analog and logic  
signal switching units

Patent Assignee: AS BELO PHYSIOLOGY (ABPH-R)

Inventor: ZHUK E V

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
SU 796858	B	19810115				198145 B

Priority Applications (No Type Date): SU 2752480 A 19790328

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
SU 796858	B		5		

Abstract (Basic): SU 796858 B

Prototype unit, with electrodes, analog -to- digital converter  
and two magnetic tape storage units was suitable only for testing a few  
(up to 8) sections of living nerve tissue.

Modified unit may be used in electrophysiological investigation of  
neuron groups, as well as in testing multiple-contact hybrid circuits  
by applying programmed stimuli to the inputs and recording the results  
on magnetic tape.

This has been made possible by the addition of analog and logic  
signal switching units, digital -to- analog converters, logic  
stimuli registers, a ring shift register as well as recording field and  
simulation field address registers, decoders, AND-gates and an OR-gate.

Bul.2/15.1.81 (5pp)

Derwent Class: S05; T01

International Patent Class (Additional): G06F-015/42

The apparatus comprises a pair of electrodes, an analog signal amplifier, an analog to digital converter, a selector to select a frequency of interest, a display monitor, and a computer to distinguish the digital signals as different frequencies, display the frequencies, and determine when the frequency is falling inside or outside a predetermined range. Also, a magnetic medium recording device is used to capture data. Finally, a lighting or sounding circuit is used to tell the organism whether the frequency under study is being inhibited or facilitated.

ADVANTAGE - Operates as a diagnostic tool as well as a means for curing nervous disorders, or abnormalities in the body, particularly the brain. (14pp Dwg.No.4/4)

Derwent Class: P31; S05

International Patent Class (Additional): A61B-005/04

20/7/8 (Item 8 from file: 350)

DIALOG(R) File 350:Derwent WPIX

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004443095

WPI Acc No: 1985-269973/198544

Electrical stimulator for tissue and nerve cell structures - has microcomputer-controlled circuits with D-A converters opto-electronically decoupled from output stages

Patent Assignee: FR-SCHILLER-UNIV JENA (UYJE )

Inventor: LEICHSENR A; SCHWIND C; SCHWIND J

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
DD 224494	A	19850710	DD 260338	A	19840227	198544 B

Priority Applications (No Type Date): DD 260338 A 19840227

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
DD 224494	A	5		

Abstract (Basic): DD 224494 A

For each stimulation circuit a microcomputer has a storage register and a digital - analog converter for the analog values of the desired waveforms. The computer also has control stages for pulse pattern transmission and constant current range selection.

Each stimulation circuit has an output stage and a constant voltage source controlled by the computer. A common coupling unit connects the constant currents to pairs of electrodes. Pref. the d/a converters and the output stages are decoupled by optoelectronic devices.

USE/ADVANTAGE - Medical research and diagnosis. Wide range of applications in standard form and can also be programmed for special uses.

0/1

Derwent Class: P34; S05

International Patent Class (Additional): A61N-001/36

DERWENT- 1985-269973

ACC-NO:

DERWENT- 198544

WEEK:

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**TITLE:** Electrical stimulator for tissue and nerve cell structures  
- has microcomputer-controlled circuits with D=A  
converters opto-electronically decoupled from output  
stages

**INVENTOR:** LEICHSENR, A; SCHWIND, C ; SCHWIND, J

**PATENT-** LEICHSENR, A SCHWIND, C SCHWIND, J FR-SCHILLER-UNIV  
**ASSIGNEE:** JENA[UYJE]

**PRIORITY-DATA:** 1984DD-0260338 (February 27, 1984)

**PATENT-FAMILY:**

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
DD 224494 A	July 10, 1985	N/A	005	N/A

**APPLICATION-DATA:**

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-DATE
DD 224494A	N/A	1984DD-0260338	February 27, 1984

**INT-CL (IPC):** A61N001/36

**ABSTRACTED-PUB-NO:** DD 224494A

**BASIC-ABSTRACT:**

For each stimulation circuit a microcomputer has a storage register and a digital-analog converter for the analog values of the desired waveforms. The computer also has control stages for pulse pattern transmission and constant current range selection.

Each stimulation circuit has an output stage and a constant voltage source controlled by the computer. A common coupling unit connects the constant currents to pairs of electrodes. Pref. the d/a converters and the output stages are decoupled by optoelectronic devices.

**USE/ADVANTAGE** - Medical research and diagnosis. Wide range of applications in standard form and can also be programmed for special

uses.

**CHOSEN-** Dwg.0/1  
**DRAWING:**

**TITLE-TERMS:** ELECTRIC STIMULATING TISSUE NERVE CELL STRUCTURE  
MICROCOMPUTER CONTROL CIRCUIT DIGITAL=ANALOGUE CONVERTER  
OPTO ELECTRONIC DECOUPLE OUTPUT STAGE

**ADDL-** MEDICAL RESEARCH DIAGNOSE  
**INDEXING-**  
**TERMS:**

**DERWENT-CLASS:** P34 S05

**EPI-CODES:** S05-A04; S05-D01; S05-D01D;

**SECONDARY-ACC-NO:**

**Non-CPI Secondary Accession Numbers:** N1985-201490



**End of Result Set**

Generate Collection

L4: Entry 1 of 1

File: DWPI

Jul 10, 1985

DERWENT-ACC-NO: 1985-269973  
DERWENT-WEEK: 198544  
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TITLE: Electrical stimulator for tissue and nerve cell structures - has microcomputer-controlled circuits with D=A converters opto-electronically decoupled from output stages

INVENTOR: LEICHSEN, A; SCHWIND, C ; SCHWIND, J

PATENT-ASSIGNEE: FR-SCHILLER-UNIV JENA (UYJE)

PRIORITY-DATA: 1984DD-0260338 (February 27, 1984)

## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<u>DD 224494 A</u>	July 10, 1985		005	

## APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
DD 224494A	February 27, 1984	1984DD-0260338	

INT-CL (IPC): A61N 1/36

ABSTRACTED-PUB-NO: DD 224494A

## BASIC-ABSTRACT:

For each stimulation circuit a microcomputer has a storage register and a digital-analog converter for the analog values of the desired waveforms. The computer also has control stages for pulse pattern transmission and constant current range selection.

Each stimulation circuit has an output stage and a constant voltage source controlled by the computer. A common coupling unit connects the constant currents to pairs of electrodes. Pref. the d/a converters and the output stages are decoupled by optoelectronic devices.

USE/ADVANTAGE - Medical research and diagnosis. Wide range of applications in standard form and can also be programmed for special uses.

ABSTRACTED-PUB-NO: DD 224494A

## EQUIVALENT-ABSTRACTS:


CHOSEN-DRAWING: Dwg.0/1

DERWENT-CLASS: P34 S05

EPI-CODES: S05-A04; S05-D01; S05-D01D;

February 20, 2003

TO: Charles Marmor, Art Unit 3736  
CP2, Room 4-D-09

FROM: Jeanne Horrigan, EIC-3700 

SUBJECT: Search Results for Serial #10/000005

Attached are the search results for a method for collecting, storing, and broadcasting specific brain waveforms to modulate body organ functioning, including results of prior art and inventor searches in foreign patent databases, and prior art searches in medical, biotechnological, and general science non-patent databases.

How Results are Organized

The material is organized into three sections: inventor search results, non-patent literature search results, and foreign/international patent search results. In each of these three sections, each set of databases and the search strategy used in those databases are indicated on the first sheet of the results of those databases.

Summary of Results

I tagged items that sounded relevant to me. However, **I suggest that you review all of the results.**

Also attached is a "Search Results Feedback Form." Your feedback will help enhance our search services.

I hope these results are useful. Please let me know if you would like me to expand or modify the search or if you have any questions.

File 350:Derwent WPIX 1963-2003/UD,UM &UP=200311  
(c) 2003 Thomson Derwent  
File 347:JAPIO Oct 1976-2002/Oct(Updated 030204)  
(c) 2003 JPO & JAPIO  
File 371:French Patents 1961-2002/BOPI 200209  
(c) 2002 INPI. All rts. reserv.

Set	Items	Description
S1	3	AU='SCHULER E L'
S2	35	AU='SCHULER E'
S3	102	AU='LEE C K'
S4	0	S1:S2 AND S3
S5	3394	AU='LEE C'
S6	0	S1:S2 AND S5
S7	94395	WAVEFORM? ? OR WAVE() FORM? ?
S8	10	S1:S5 AND S7

8/26, TI/1 (Item 1 from file: 350)  
DIALOG(R) File 350: Derwent WPIX  
(c) 2003 Thomson Derwent. All rts. reserv.

015006452

WPI Acc No: 2003-066969/200306

Color conversion method of light emitting pointer for vehicle dashboard,  
involves controlling switching operation of three light sources with  
respect to perception of viewer's eye

8/26, TI/2 (Item 2 from file: 350)  
DIALOG(R) File 350: Derwent WPIX  
(c) 2003 Thomson Derwent. All rts. reserv.

014274709

WPI Acc No: 2002-095411/200213

Portable electric stimulator

8/26, TI/3 (Item 3 from file: 350)  
DIALOG(R) File 350: Derwent WPIX  
(c) 2003 Thomson Derwent. All rts. reserv.

013188844

WPI Acc No: 2000-360717/200031

IMAGE LINE SIGNAL WAVEFORM ANALYSIS DEVICE - NoAbstract

8/26, TI/4 (Item 4 from file: 350)  
DIALOG(R) File 350: Derwent WPIX  
(c) 2003 Thomson Derwent. All rts. reserv.

012953791

WPI Acc No: 2000-125641/200011

Delayed lock loop for recovering Manchester coded digital data into  
original data

8/26, TI/5 (Item 5 from file: 350)  
DIALOG(R) File 350: Derwent WPIX  
(c) 2003 Thomson Derwent. All rts. reserv.

012325788

WPI Acc No: 1999-131895/199911

Low-voltage monolithic system for heart defibrillation and pacing - in  
which heart circuit is provided for pacing heart following successful  
defibrillation

8/26, TI/6 (Item 6 from file: 350)  
DIALOG(R) File 350: Derwent WPIX  
(c) 2003 Thomson Derwent. All rts. reserv.

011054317

WPI Acc No: 1997-032241/199703

Active matrix type LCD elements

8/26, TI/7 (Item 7 from file: 350)  
DIALOG(R) File 350: Derwent WPIX  
(c) 2003 Thomson Derwent. All rts. reserv.

010205211

WPI Acc No: 1995-106465/199514

Optical disc high speed search control device having reduced access time  
- controls crossing speed of optical tracks during coarse seek by

counting track traverse signal of optical head

8/26, TI/8 (Item 8 from file: 350)

DIALOG(R) File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

009708433

WPI Acc No: 1993-401986/199350

Driving super twisted nematic liquid crystal display to prevent contrast variation - dividing waveform applied to segment electrodes by three, combining with waveform applied to common electrodes, and combining high state signal with sections of divided waveform NoAbstract

8/26, TI/9 (Item 9 from file: 350)

DIALOG(R) File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

009288656

WPI Acc No: 1992-416067/199250

Power line communication appts. - uses redundant carriers at a frequency between television interference harmonics

8/26, TI/10 (Item 10 from file: 350)

DIALOG(R) File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

008986637

WPI Acc No: 1992-113906/199214

Appts. for counting test signal w.r.t. clock frequency - has counter to accumulate integer count of clock cycles during sample and logic circuit to determine correction to be added to count

File 348:EUROPEAN PATENTS 1978-2003/Feb W02

(c) 2003 European Patent Office

File 349:PCT FULLTEXT 1979-2002/UB=20030206,20030123

(c) 2003 WIPO/Univentio

Set	Items	Description
S1	4	AU='SCHULER ELEANOR L'

1/6/1 (Item 1 from file: 348)

01060146

**ADAPTER FOR MEDICAL PULSE GENERATORS AND ELECTRODE PADS**

**ADAPTATEUR POUR GENERATEUR D'IMPULSIONS MEDICALES ET ELECTRODES**

LANGUAGE (Publication,Procedural,Application): English; English; English

1/6/2 (Item 2 from file: 348)

01023865

**DEFIBRILLATOR/PACEMAKER**

**DEFIBRILLATOR / HERZSCHRITTMACHER**

**DEFIBRILLATEUR ET STIMULATEUR CARDIAQUE**

LANGUAGE (Publication,Procedural,Application): English; English; English

1/6/3 (Item 1 from file: 349)

00498017 \*\*Image available\*\*

**ADAPTER FOR MEDICAL PULSE GENERATORS AND ELECTRODE PADS**

**ADAPTATEUR POUR GENERATEUR D'IMPULSIONS MEDICALES ET ELECTRODES**

Publication Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 3711

Publication Year: 1999

1/6/4 (Item 2 from file: 349)

00472182 \*\*Image available\*\*

**DEFIBRILLATOR/PACEMAKER**

**DEFIBRILLATEUR ET STIMULATEUR CARDIAQUE**

Publication Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 5151

Publication Year: 1999

File 155:MEDLINE(R) 1966-2003/Feb W2  
 (c) format only 2003 The Dialog Corp.  
 File 5:Biosis Previews(R) 1969-2003/Feb W2  
 (c) 2003 BIOSIS  
 File 73:EMBASE 1974-2003/Feb W2  
 (c) 2003 Elsevier Science B.V.  
 File 34:SciSearch(R) Cited Ref Sci 1990-2003/Feb W2  
 (c) 2003 Inst for Sci Info  
 File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec  
 (c) 1998 Inst for Sci Info

Set	Items	Description
S1	27	AU='SCHULER E.'
S2	75	AU='SCHULER E'
S3	763	AU='LEE C K'
S4	286	AU='LEE C.K.'
S5	1080	AU='LEE CK'
S6	0	S1:S2 AND S3:S5
S7	2231	S1:S5
S8	59658	WAVEFORM? ? OR WAVE()FORM? ?
S9	262692	AUTONOMIC
S10	2626394	NERVE? ? OR NERVOUS
S11	1	S7 AND S8 AND S9:S10



11/7/1 (Item 1 from file: 5)  
DIALOG(R)File 5: Biosis Previews(R)  
(c) 2003 BIOSIS. All rts. reserv.

09026759 BIOSIS NO.: 199497035129

**Middle cerebral artery blood flow velocity in health persons during wakefulness and sleep: A transcranial Doppler study.**

AUTHOR: Droste D W(a); Berger W; Schuler E ; Krauss J K

AUTHOR ADDRESS: (a)Neurologische Universitätsklinik Hansastr. 9, D-79104  
Freiburg i. Br.\*\*Germany

JOURNAL: Sleep (Rochester) 16 (7):p603-609 1993

ISSN: 0161-8105

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

ABSTRACT: In 10 normal young adults, middle cerebral artery blood flow velocity was measured continuously over one night by transcranial Doppler sonography. Polysomnography was used to assess the different sleep stages and waking state. During rapid eye movement (REM) sleep, middle cerebral artery blood flow velocity was higher than in any other sleep stage and wakefulness. During the waking state the velocity was higher than in sleep stage 2. Spontaneous rhythmic oscillations of cerebral blood flow velocity were found related to different stages of sleep. A fast Fourier's transformation of the Doppler wave forms revealed a periodicity of 20-75 seconds, which was most prominent during REM sleep and to a lesser degree during sleep stages 1, 2 and 3 and the waking state. These waves may correspond to intracranial pressure changes referred to as B-waves.

File 155:MEDLINE(R) 1966-2003/Feb W3

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Set	Items	Description
S1	82105	'AUTONOMIC NERVOUS SYSTEM' OR DC='A8.800.50.' OR R6:R29
S2	43133	PERIPHERAL()NERV???
S3	11861	WAVE() (SHAPE OR SHAPES OR FORM? ?) OR WAVEFORM? ? OR WAVES- HAPE?..?
S4	221	ANALOG(2W) (SIGNAL? ? OR PULSE OR PULSES OR IMPULSE? ?)
S5	318	DAC OR DIGITAL(2W)ANALOG()CONVERTER? ?
S6	153	ANALOG(2W)DIGITAL()CONVERTER? ?
S7	2	S3:S4 AND S5 AND S6
S8	925815	'NERVOUS SYSTEM' OR 'CASCADED TERM/DC=A8.' OR DC='A8.'
S9	3105	(S1 OR S2 OR S8) AND S3:S4
S10	2	S5:S6 AND S9
S11	2	S10 NOT S7

7/7/1

DIALOG(R) File 155:MEDLINE(R)

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07027347 91336510 PMID: 1872462

A microprocessor-regulated constant voltage, current, wattage, and temperature electrophoresis power supply.

Mincey D W; Kuzior K J; Allen L H; Frease J S; Strasser I N

Department of Chemistry, Youngstown State University, Ohio 44555.

Analytical biochemistry (UNITED STATES) Mar 2 1991, 193 (2) p168-72,  
ISSN 0003-2697 Journal Code: 0370535

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

The analog control circuitry typically found in commercial electrophoresis power supplies was replaced by a digital microcomputer. Analog to digital converters were used to monitor the voltage applied to and current passed through an electrophoresis cell. Microcomputer programming was employed to compare converter input values with preselected operating parameters and then calculate a required output voltage. Timing sequences were generated through programming utilizing clocks located on the interface boards. A digital to analog converter was employed to apply a control voltage to a constant voltage power supply. This process was completed at least 20 times each second. BASIC programming subroutines were written to maintain constant voltage, current, power (wattage), and temperature. To these operating procedures, other techniques such as automated endpoint detection of isoelectric focusing and pulsed waveform outputs were easily added. This power supply containing a microcomputer system as the feedback element was shown to have a greater stability and versatility than conventional supplies.

Record Date Created: 19910919

7/7/2

DIALOG(R) File 155:MEDLINE(R)

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05445398 87196863 PMID: 3572195

Analog and digital computer theory.

Block F E

International journal of clinical monitoring and computing (NETHERLANDS)  
1987, 4 (1) p47-51, ISSN 0167-9945 Journal Code: 8601284

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Analog signals abound in the natural world. With appropriate transducers these signals can be converted to continuous voltages and can be displayed, transmitted, stored, or copied. They can be processed by analog computers, the simplest of which is an audio amplifier. With analog signals, however, there can be errors because of signals loss, interference, and noise. Binary digital signals permit only two values, either 0 ('off' or 'low') or 1 ('on' or 'high'). These signals are much less susceptible to transmission problems. Binary signals are commonly organized into 8-bit groups which can represent 256 different numbers or meanings. These data can be transmitted in either serial or parallel

fashion at high rates of speed. Analog -to- digital converters permit analog signals to be transformed to digital signals. A computer consists of the memory, the processor, and the input/output devices. Memory includes the fastest registers, the very fast core memory, the peripheral storage devices such as diskettes and disks, and the very slow peripheral devices such as magnetic tape. The processor can only load and store numbers in memory, add two numbers, test a number, and provide input and output. The program counter indicates the next computer instruction to be performed. Input/output devices allow communication with the outside world and may assume many forms. A computer by itself can do nothing. A program or series of instructions is required. The most simplistic program language is assembler or machine language. Most programming is done in more sophisticated languages, however. (ABSTRACT TRUNCATED AT 250 WORDS)

11/7/1

DIALOG(R) File 155:MEDLINE(R)

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10518969 20061164 PMID: 10595715

A combined electrophysiological and video data acquisition system using a single computer.

Martin P D; Nishijo H; Ono T

Department of Physiology, Faculty of Medicine, Toyama Medical and Pharmaceutical University, Sugitani, Japan.

Journal of neuroscience methods (NETHERLANDS) Oct 15 1999, 92 (1-2) p169-77, ISSN 0165-0270 Journal Code: 7905558

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Numerous experimental paradigms in behavioral electrophysiology and neuroethology require simultaneous recording of neural signals and behavior. A computer fitted with an analog to digital converter and a frame grabber was configured to perform both tasks. The analog to digital converter collected electrophysiological data while the frame grabber recorded video images. Since spike and image information were present in one computer, arbitrary combinations of electrophysiological and behavioral parameters could be used as the basis of an operant conditioning paradigm. The system was used to record subicular cell firing in rats performing a place search task. The computer monitored the output of the analog to digital converter for supra-threshold events. When one was detected, a block of samples (pre- and post-trigger) was stored in memory. The same computer also scanned every video frame to find the rat, and recorded a image of its behavior. The location of the rat was then quickly calculated. If it satisfied the task conditions, a brain reward pathway (medial forebrain bundle) was stimulated. The recording of neural and image data was monitored in real-time by writing spike waveforms and location data directly to video card RAM.

Record Date Created: 20000104

11/7/2

DIALOG(R) File 155:MEDLINE(R)

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08128638 94262386 PMID: 8203210

Computer analysis for routine electronystagmography tests.

Nakamura T; Kanayama R; Aoyagi M; Kato I; Koike Y

Department of Otolaryngology, Yamagata University School of Medicine, Japan.

Acta oto-laryngologica. Supplementum (NORWAY) 1994, 511 p109-13, ISSN 0365-5237 Journal Code: 0370355

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

A computer program has been developed for on-line analysis of routine electronystagmography (ENG) tests. With this system, data acquisition of eye movements and stimulus signals obtained from ENG are accomplished at a rate of 200 Hz through a 12-bit analog - digital converter. A small spotlight for eye tracking tests is sinusoidally driven by a computer-generated analog signal. Six optokinetic stripes projected onto a screen are also controlled by the computer. Seven spots for saccade tests can be turned on or off based on digital signals produced through a

*neuroethology*

digital output device. There are three types of eye movements in this series: nystagmus, pursuit eye movement and saccadic eye movement. An algorithm for the analysis of different eye movements is described in this paper. Recent significant advances in computer technology make it possible to perform such complicated tasks and to accomplish quantitative assessment of any type of eye movements in routine ENG tests. Consequently, computer analysis provides clues to the location of a disease and is very useful as a diagnostic tool in routine ENG testing.

Record Date Created: 19940707

File 73:EMBASE 1974-2003/Feb W2  
(c) 2003 Elsevier Science B.V.

File 5:Biosis Previews(R) 1969-2003/Feb W3  
(c) 2003 BIOSIS

File 34:SciSearch(R) Cited Ref Sci 1990-2003/Feb W2  
(c) 2003 Inst for Sci Info

File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec  
(c) 1998 Inst for Sci Info

File 144:Pascal 1973-2003/Feb W2  
(c) 2003 INIST/CNRS

File 6:NTIS 1964-2003/Feb W3  
(c) 2003 NTIS, Intl Cpyrght All Rights Res

File 2:INSPEC 1969-2003/Feb W2  
(c) 2003 Institution of Electrical Engineers

File 8:Ei Compendex(R) 1970-2003/Feb W2  
(c) 2003 Elsevier Eng. Info. Inc.

File 99:Wilson Appl. Sci. & Tech Abs 1983-2003/Jan  
(c) 2003 The HW Wilson Co.

File 65:Inside Conferences 1993-2003/Feb W3  
(c) 2003 BLDSC all rts. reserv.

File 94:JICST-EPlus 1985-2003/Feb W3  
(c)2003 Japan Science and Tech Corp(JST)

File 35:Dissertation Abs Online 1861-2003/Jan  
(c) 2003 ProQuest Info&Learning

Set	Items	Description
S1	2509937	NERVOUS()SYSTEM OR (AUTONOMIC OR PERIPHERAL)()NERV???
S2	187680	WAVE() (SHAPE OR SHAPES OR FORM OR FORMS) OR WAVEFORM? ? OR WAVESHAPE? ?
S3	19079	(ANALOG OR ANALOGUE) (2W) (SIGNAL? ? OR PULSE OR PULSES OR I-MPULSE? ?)
S4	17001	DAC OR DIGITAL(2W)ANALOG()CONVER????
S5	24579	ANALOG(2W)DIGITAL()CONVER????
S6	176424	ANS OR PNS
S7	8289	(S1 OR S6) AND S2:S3
S8	0	S4 AND S5 AND S7
S9	10	S4:S5 AND S7
S10	9	RD (unique items)
S11	0	S10/2003 OR S10/2002 OR S10/2001
S12	9	Sort S10/ALL/PY,D
S13	954460	CONVERSION? ? OR CONVERTER? ?
S14	88	S7 AND S13
S15	87744	ANALOG AND DIGITAL
S16	13	S14 AND S15
S17	5	S16 NOT S9
S18	5	RD (unique items)
S19	3164726	NERV???
S20	1	S19 AND S2:S3 AND S4 AND S5
S21	1	S20 NOT (S9 OR S16)

12/6/1 (Item 1 from file: 5)  
12308576 BIOSIS NO.: 200000066443  
A combined electrophysiological and video data acquisition system using a  
single computer.  
1999

12/6/3 (Item 3 from file: 5)  
10181531 BIOSIS NO.: 199698636449  
Sampling variation caused by A/D cards due to external trigger.  
1995

12/6/4 (Item 4 from file: 5)  
09955290 BIOSIS NO.: 199598410208  
AAEM minimonograph 16: Instrumentation and measurement in electrodiagnostic  
medicine-part II.  
1995

12/6/5 (Item 5 from file: 94)  
02347207 JICST ACCESSION NUMBER: 95A0479259 FILE SEGMENT: JICST-E  
Quantitative Analysis of Smooth Pursuit Eye Movement., 1995

12/6/6 (Item 6 from file: 144)  
11486323 PASCAL No.: 94-0324317  
Computer analysis for routine electronystagmography tests  
Recent activities in neurotology and otorhinolaryngology  
1994

12/6/8 (Item 8 from file: 73)  
03202245 EMBASE No: 1986134822  
Roundoff errors in signal averaging systems  
1986

12/6/9 (Item 9 from file: 73)  
02425904 EMBASE No: 1983136915  
The action potential clamp as a test of space-clamp effectiveness: The  
Letvin analog axon  
1983

12/7/2 (Item 2 from file: 35)  
DIALOG(R)File 35:Dissertation Abs Online  
(c) 2003 ProQuest Info&Learning. All rts. reserv.  
01632776 ORDER NO: AAD98-25366  
A SINGLE CHIP, FULLY INTEGRATED, TELEMETRY POWERED SYSTEM FOR PERIPHERAL  
NERVE STIMULATION (NEUROMUSCULAR STIMULATION)  
Author: VON ARX, JEFFREY ALLEN  
Degree: PH.D.  
Year: 1998  
Corporate Source/Institution: THE UNIVERSITY OF MICHIGAN (0127)  
Chair: KHALIL NAJAFI  
Source: VOLUME 59/02-B OF DISSERTATION ABSTRACTS INTERNATIONAL.  
PAGE 807. 129 PAGES

This work describes the first telemetry powered implantable  
microsystem to be fully integrated onto a single chip. This system is an  
8-channel programmable neuromuscular stimulator for use with peripheral  
nerve electrodes. This implant receives all power and data through  
inductive coupling with an integrated, on-chip coil. Therefore, it requires  
no batteries or transcutaneous leads. Because it is fully integrated, this



is one of the smallest wireless implantable stimulators ever developed.

The system's stimulating output is a biphasic current waveform with a programmable interphase delay. Each phase has a 5-bit programmable amplitude of up to 2 mA, and a 10-bit programmable duration of up to 2 ms. The system is capable of stimulation frequencies of over 150 Hz. Full scale stimulation can be obtained through loads of up to  $1.7 \text{ k}\Omega$ . The system is powered by a 4 MHz carrier, and data is sent by pulse width encoded amplitude modulation.

The system's integrated circuitry is Bi-CMOS, contains 3,100 transistors, and measures 2.0 mm by 8.7 mm. It includes an RF receiver, a 4 Volt DC supply generator, a 500 kHz clock generator, data detection circuitry, finite state machine controlled logic, a 5-bit DAC output current source, and low resistance output switches. This circuitry was fabricated, tested, and is fully functional. It consumes 14.8 mW from the 4 Volt supply during full scale 2 mA stimulation.

Integrated on-chip coils optimized for inductive powering were developed as part of this work. These coils have electroplated copper windings, electroplated NiFe core, planar spiral design, and are CMOS compatible. Six different coil structures were fabricated, tested, and compared. A 2 by 10 mm, seventeen turn version of the best coil structure has an inductance of  $2.9 \mu\text{H}$  and receives over 20 mW DC at a distance of up to 3 cm from a 8-cm diameter planar transmitter coil. An analytical model for inductive powering using on-chip coils has been developed, and the design of the on-chip coils was optimized using this model. General design guidelines for on-chip coils have been devised which, together with the analytical model, can be used to quickly implement on-chip coils for inductively powering many different microsystems.

12/7/7 (Item 7 from file: 144)

DIALOG(R) File 144:Pascal

(c) 2003 INIST/CNRS. All rts. reserv.

10712648 PASCAL No.: 93-0221962

A 16-channel CMOS neural stimulating array : Analog and signal processing circuits

TANGHE S J; KENSALL D W

Univ. Michigan, cent. integrated sensors circuits, dep. electrical eng. computer sci., Ann Arbor MI 48109-2111, USA

Journal: IEEE journal of solid-state circuits, 1992, 27 (12) 1819-1825

ISSN: 0018-9200 CODEN: IJSCBC Availability: INIST-222 L;

354000032279240210

No. of Refs.: 19 ref.

Document Type: P (Serial) ; A (Analytic)

Country of Publication: USA

Language: English

This paper describes a probe designed for the highly selective long-term stimulation of neuronal assemblies in the central nervous system. The micromachined multishank probe incorporates CMOS circuitry to control the output current on 16 iridium oxide (IrO) electrode sites. Serial site addresses and current amplitude data are loaded into the probe at 4 MHz and converted to analog stimulus currents over a range of  $\pm 254 \mu\text{A}$  using 16 on-chip 8-bit DAC's

18/6/1 (Item 1 from file: 73)  
02551418 EMBASE No: 1983025429  
Digital reproduction of biopotential waveforms for neurophysiological studies  
1982

18/6/3 (Item 1 from file: 5)  
11586438 BIOSIS NO.: 199800367134  
Digital conversion of paper electroencephalograms using a hand scanner.  
1997

18/6/5 (Item 1 from file: 99)  
1205713 H.W. WILSON RECORD NUMBER: BAST95001085  
A three-dimensional microelectrode array for chronic neural recording  
19941200

18/7/2 (Item 2 from file: 73)  
DIALOG(R) File 73:EMBASE  
(c) 2003 Elsevier Science B.V. All rts. reserv.  
02423776 EMBASE No: 1983134787  
A programmable electrical stimulator suitable for control of respiration studies

Hopp F.A.; Zuperku E.J.; Kampine J.P.

Dep. Anesthesiol., Med. Coll. Wisconsin, Milwaukee, WI 53193 United States

Journal of Applied Physiology Respiratory Environmental and Exercise Physiology ( J. APPL. PHYSIOL. RESPIR. ENVIRON. EXERCISE PHYSIOL. ) ( United States) 1983, 54/4 (1149-1156)

CODEN: JARPD

DOCUMENT TYPE: Journal

LANGUAGE: ENGLISH

Both mechanical and electrical stimuli have been used to study the role of slowly adapting pulmonary stretch receptors (PSR) in the control of respiration. Electrical stimulation allows very precise discharge patterns to be evoked in PSR fibers. A programmable stimulation system has been developed to allow specific discharge patterns to be delivered within particular breaths. This system consists of a phrenic processing unit, a highly linear voltage-to-frequency converter (VFC), synchronized calibrated waveform generators, analog selector switches, a digital programmable control unit, and an isolated constant-current pulse output unit. The phrenic processing unit provides the moving time with average of the phrenic discharge,  $PNG(t)$ , and its first time derivative  $d(PNG(t))/dt$ .  $PNG(t)$  and  $d(PNG(t))/dt$  are used to generate timing pulses at the upstroke and the peak of the  $PNG(t)$ , respectively. For a particular breath, the control unit can be programmed to select one of four possible waveforms as input to the VFC by means of the switches. The desired waveform is selected at the upstroke of  $PNG(t)$ . Any combination of patterns can be programmed. An instruction is available to allow recycling through the same program as often as desired. The waveform generators are capable of generating calibrated steps, ramps, pulses, and delayed pulses. These patterns may be synchronized to the beginning of the inspiratory or the expiratory period and terminated at the end of the inspiratory or the expiratory periods.

18/7/4 (Item 2 from file: 5)  
DIALOG(R) File 5: Biosis Previews(R)

(c) 2003 BIOSIS. All rts. reserv.

10535131 BIOSIS NO.: 199699156276

DAPAS, a computerised workplace for Digital Acquisition and Processing of Analog Signals, with up to two gigabytes data per registration.

AUTHOR: Widman G(a); Bingmann D

AUTHOR ADDRESS: (a)Inst. Physiol., Univ.-GH Essen, Hufelandstr. 55, 45122 Essen\*\*Germany

JOURNAL: Journal of Neuroscience Methods 67 (1):p71-81 1996

ISSN: 0165-0270

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

ABSTRACT: A comprehensive and flexible arrangement for Digital long-term Acquisition and Processing of Analog Signals (DAPAS) has been developed. It is especially designed for neurophysiological laboratories and mainly based on IBM-compatible PC components. A/D converters are used, which allow sampling rates of up to 100 kHz (up to 16 bits, 1-16 channels). Signals are stored continuously on DOS devices and on a fast tape streamer, which uses standard video-8 tapes, and which is 2.8 times faster than DAT-based systems. As the recording speed is adapted to the sampling rate, one tape allows recording times of (uncompressed) data acquired at a sampling rate of 100 or 10 kHz of 6.8 and 68 h, respectively. Using a coprocessor-video device, recordings may be scrolled on- or off-line on the screen. In addition, up to eight multi-channel oscilloscopes are displayed simultaneously. DAPAS allows the use of a conventional matrix printer which can act as an inertia-free multi-pen recorder. Defined stored signals are recalled by means of a time code or textual markers. All sections of recordings lasting milliseconds to hours may be displayed within seconds. DAPAS supports export filters for further processing. Thus, this system replaces analog devices (multi-pen recorder, oscilloscope, data recorder), and enables quick, complete digital processing and analysis of neurophysiological data.

21/6/1 (Item 1 from file: 73)  
06562049 EMBASE No: 1996223060

Neurobiological characterization of consciousness by means of an analog  
to digital conversion in the brain

DE COMO LA CONCIENCIA ES UN PROCESO QUE COMIENZA CON UNA CONVERSION  
ANALOGICA-DIGITAL Y TERMINA, PROBABLEMENTE, CON UNA DIGITAL-ANALOGICA,  
INTEGRADA POR LOS GENES, LA PERCEPCION Y LA MEMORIA

1996

File 95:TEME-Technology & Management 1989-2003/Feb W1  
 File 98:General Sci Abs/Full-Text 1984-2003/Jan  
 File 9:Business & Industry(R) Jul/1994-2003/Feb 19  
 File 16:Gale Group PROMT(R) 1990-2003/Feb 19  
 File 160:Gale Group PROMT(R) 1972-1989  
 File 148:Gale Group Trade & Industry DB 1976-2003/Feb 19  
 File 621:Gale Group New Prod.Annou.(R) 1985-2003/Feb 19  
 File 149:TGG Health&Wellness DB(SM) 1976-2003/Feb W1  
 File 636:Gale Group Newsletter DB(TM) 1987-2003/Feb 19  
 File 441:ESPICOM Pharm&Med DEVICE NEWS 2003/Feb W3  
 File 20:Dialog Global Reporter 1997-2003/Feb 20  
 File 442:AMA Journals 1982-2003/May B1  
 File 444:New England Journal of Med. 1985-2003/Feb W4

Set	Items	Description
S1	98950	NERVOUS()SYSTEM OR (AUTONOMIC OR PERIPHERAL)()NERV???
S2	32309	WAVE() (SHAPE OR SHAPES OR FORM OR FORMS) OR WAVEFORM? ? OR WAVESHAPE? ?
S3	38726	(ANALOG OR ANALOGUE) (2W) (SIGNAL? ? OR PULSE OR PULSES OR I-MPULSE? ?)
S4	20878	DAC OR DIGITAL(2W)ANALOG()CONVER????
S5	12401	ANALOG(2W)DIGITAL()CONVER????
S6	22927	ANS OR PNS
S7	68	(S1 OR S6) (S) S2:S3
S8	2118	S4 AND S5
S9	0	S7 AND S8
S10	1767465	CONVER????
S11	373309	ANALOG OR ANALOGUE
S12	2267485	DIGITAL
S13	9	S7 AND S10
S14	12	S7 AND S11
S15	16	S7 AND S12
S16	5	S13 AND S14
S17	3	S13 AND S15
S18	3	S16 AND S17
S19	3	RD (unique items)
S20	20	S13:S15 NOT S18
S21	16	RD (unique items)
S22	1	S21/2003 OR S21/2002 OR S21/2001
S23	15	S21 NOT S22
S24	15	Sort S23/ALL/PD,D

19/6/1 (Item 1 from file: 149)  
01993984 SUPPLIER NUMBER: 74293249 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
Continuous Positive Airway Pressure Normalizes Cardiac Autonomic and  
Hemodynamic Responses to a Laboratory Stressor in Apneic Patients(\*).  
2001  
WORD COUNT: 6497 LINE COUNT: 00571

19/6/2 (Item 1 from file: 442)  
00045420  
Neurophysiological Evidence of Auditory Channel Anomalies in Developmental  
Dysphasia (ORIGINAL CONTRIBUTIONS )  
1989;  
LINE COUNT: 00257 WORD COUNT: 03557

19/6/3 (Item 2 from file: 442)  
00034865  
Multichannel Cochlear Implants; Channel Interactions and Processor Design  
(ORIGINAL ARTICLE)  
1984;  
LINE COUNT: 00448 WORD COUNT: 06194

24/8/3 (Item 3 from file: 20)  
DIALOG(R) File 20:(c) 2003 The Dialog Corp. All rts. reserv.  
01713429 (USE FORMAT 7 OR 9 FOR FULLTEXT)  
Alcatel STL Digital Video Radio Awarded 'Editors' Pick of Show' At NAB  
'98  
May 13, 1998  
WORD COUNT: 504  
COMPANY NAMES: Alcatel-Alsthom Compagnie Generale d'Electricite  
COUNTRY NAMES/CODES: France (FR)  
REGIONS: Europe; Western Europe

24/8/5 (Item 5 from file: 95)  
DIALOG(R) File 95:(c) 2003 FIZ TECHNIK. All rts. reserv.  
00922282 E95090397208  
Minimisation of interharmonic currents from a current source A.C. drive by  
means of a selective D.C. side active filter  
1995  
DESCRIPTORS: ELECTRIC DRIVES; CURRENT CONVERTER ; PULSE TIME MODULATION;  
SYNCHRONOUS MOTORS; HARMONIC COMPONENT; VOLTAGE WAVEFORM DISTORTION;  
ANGULAR SPEED; INTERMEDIATE CIRCUITS; DC--DIRECT CURRENT; ACTIVE FILTERS;  
BEHAVIOUR--PERFORMANCE; OPERATING PRINCIPLES; THEORETICAL MODELS; SYSTEM  
SIMULATION; EXPERIMENTAL RESULTS; SYSTEM DESCRIPTION; CURRENT CONVERTER  
DRIVES; CURRENT DISTORTIONS

24/8/7 (Item 7 from file: 442)  
DIALOG(R) File 442:(c)2003 Amer Med Assn -FARS/DARS apply. All rts. reserv.  
00050446  
Nystagmus of Pelizaeus-Merzbacher Disease: A Magnetic Search-Coil Study (Article)  
1991;

24/8/8 (Item 8 from file: 442)  
DIALOG(R) File 442:(c)2003 Amer Med Assn -FARS/DARS apply. All rts. reserv.  
00040864  
Copyright (C) 1988 American Medical Association  
Continuous Intracranial Pressure Monitoring and Serial

Electroencephalographic Recordings in Severely Asphyxiated Term Neonates (ARTICLES)

1988;

LINE COUNT: 00325

WORD COUNT: 04493

24/8/9 (Item 9 from file: 160)

DIALOG(R)File 160:(c) 1999 The Gale Group. All rts. reserv.

01867937

DIGITECH ANNOUNCES COMPLETION OF RESEARCH AND DEVELOPMENT ON SPEECH RECOGNITION TECHNOLOGY

February 3, 1988

COMPANY:

\*Digitech (US)

PRODUCT: \*Speech Recognition Equip (3662664)

EVENT: \*Product Design & Development (33)

COUNTRY: \*United States (1USA)

24/8/10 (Item 10 from file: 160)

DIALOG(R)File 160:(c) 1999 The Gale Group. All rts. reserv.

01769145

Q-cath Cath Lab Recording System

August 20, 1987

COMPANY:

\*Quinton Instrument

PRODUCT: \*Electronic Diagnostic, Monitor Eqp (3841206); Heart Catheterization Systems (3841214)

EVENT: \*Product Design & Development (33)

COUNTRY: \*United States (1USA)

24/8/11 (Item 11 from file: 160)

DIALOG(R)File 160:(c) 1999 The Gale Group. All rts. reserv.

01637707

OPTO-COUPLER RANGE OFFERS FAST, RELIABLE SWITCHING WITH VERY HIGH I/O ISOLATION.

March, 1987

COMPANY:

\*Jermyn Distribution

Jermyn Distribution

PRODUCT: \*Optoelectronic Isolators & Couplers (3674450); Optoelectronic Devices NEC (3674490)

EVENT: \*Product Design & Development (33)

COUNTRY: \*United Kingdom (4UK)

24/8/12 (Item 12 from file: 442)

DIALOG(R)File 442:(c)2003 Amer Med Assn -FARS/DARS apply. All rts. reserv.

00035959

Copyright (C) 1986 American Medical Association

Neuronal Morphology in the Human Cochlear Nucleus (ORIGINAL ARTICLE)

1986;

LINE COUNT: 00376

WORD COUNT: 05191

24/8/13 (Item 13 from file: 148)

DIALOG(R)File 148:(c)2003 The Gale Group. All rts. reserv.

02819871 SUPPLIER NUMBER: 04119132 (USE FORMAT 7 OR 9 FOR FULL TEXT)

Harnessing computers together. (the multiprocessor revolution)

Feb-March, 1986

WORD COUNT: 6624 LINE COUNT: 00552

SPECIAL FEATURES: illustration; photograph; chart  
INDUSTRY CODES/NAMES: ENG Engineering and Manufacturing; BUS  
Business, General  
DESCRIPTORS: Very-large-scale integration--Innovations; Parallel  
processing--Usage; Artificial intelligence--Research; Digital computers  
--Innovations; Computer architecture--Innovations; Multiprogramming  
(Electronic computers)--Usage; Multiprocessors--Innovations

24/8/15 (Item 15 from file: 149)

DIALOG(R) File 149:(c) 2003 The Gale Group. All rts. reserv.

01070345 SUPPLIER NUMBER: 03316697 (USE FORMAT 7 OR 9 FOR FULL TEXT)

Is there an evoked vascular response. (event-related potentials of the  
brain)

1984

WORD COUNT: 1153 LINE COUNT: 00117

SPECIAL FEATURES: illustration; graph

DESCRIPTORS: Brain research--Observations; Neurochemistry--Research;  
Psychophysiology--Research

24/3,K/1 (Item 1 from file: 149)

DIALOG(R) File 149:TGG Health&Wellness DB(SM)

(c) 2003 The Gale Group. All rts. reserv.

01852511 SUPPLIER NUMBER: 55525483 (USE FORMAT 7 OR 9 FOR FULL TEXT)

Treatment of Neuropathic Pain in a Patient With Diabetic Neuropathy Using  
Transcutaneous Electrical Nerve Stimulation Applied to the Skin of the  
Lumbar Region.

Somers, David L; Somers, Martha F

Physical Therapy, 79, 8, 767

August,

1999

PUBLICATION FORMAT: Magazine/Journal; Refereed ISSN: 0031-9023

LANGUAGE: English RECORD TYPE: Fulltext; Abstract TARGET AUDIENCE:  
Professional

WORD COUNT: 5461 LINE COUNT: 00452

...AUTHOR ABSTRACT: knee. The pain prevented sound sleep. The intensity of  
pain was assessed with a visual analog scale. Intervention. The TENS (80  
Hz) was delivered 1 to 2 hours a day and...

... old woman who was admitted to the hospital with atrial  
fibrillation. Although the fibrillation was converted to a normal sinus  
rhythm with medication, the patient's stay at the hospital was...with her  
description of the location and extent of the painful area. Finally, a  
visual analog scale (VAS) was used to assess the intensity of perceived  
pain. For each painful area...dorsal columns(36) reduced the pain of  
causalgia, a painful peripheral neuropathy that develops following  
peripheral nerve injury. It should be noted that the stimulation  
characteristics used in all of these studies were widely divergent, yet  
still effective. For our patient, we used Empti's biphasic waveform (80  
Hz, variable pulse width (200-400 microseconds), 44-60 mA). In other  
studies in...19.

(27) Ahles TA, Ruckdeschel JC, Blanchard EB. Cancer-related pain, II:  
assessment with visual analogue scales. J Psychosom Res. 1984;28:  
121-124.

(28) Ferraz MB, Quaresma MR, Aquino LR...

...Simpson JM, Charlton JE, Phillips ME. An evaluation of length and  
end-phrase of visual analogue scales in dental pain. Pain.  
1985;21:177-185.



(31) Marchand S, Charest J, Li...

24/3,K/2 (Item 2 from file: 148)  
DIALOG(R)File 148:Gale Group Trade & Industry DB  
(c)2003 The Gale Group. All rts. reserv.  
10536525 SUPPLIER NUMBER: 21043851 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
Smart instruments make doctors' jobs easier. (includes related article on  
oscilloscopes in neuroscience)  
Masi, C.G.  
R & D, v40, n9, p22(5)  
August, 1998  
ISSN: 0746-9179 LANGUAGE: English RECORD TYPE: Fulltext; Abstract  
WORD COUNT: 2602 LINE COUNT: 00211

24/3,K/4 (Item 4 from file: 95)  
DIALOG(R)File 95:TEME-Technology & Management  
(c) 2003 FIZ TECHNIK. All rts. reserv.  
01286935 I99030687300  
Analysis of QT interval during passive tilt test: comparison of different  
correction formula  
Badilini, F; Maison-Blanche, P; Spaulding, R; Palma, M; Cournel, P  
Hopital Lariboisiere, Paris, France  
Computers in Cardiology 1998. Vol. 25 (Cat. No.98CH36292), 13-16 Sept.  
1998, Cleveland, OH, USA1998  
Document type: Conference paper Language: English  
Record type: Abstract  
ISBN: 0-7803-5200-9  
ABSTRACT:  
...in QT interval were assessed on 1 minute time related templates and on  
rate-independent waveforms obtained by averaging beats preceded by the  
same RR interval. Following Tilt, the mean RR...  
...to 413±21 ms, p=0.058) whereas exponential QTc did not change  
significantly. Conversely, QTf and QTl (respectively Fridericia and  
linear rate-corrected QT), decreased after Tilt (e.g...  
...0.1). Thus, rate-correction formula are inconsistent and should be used  
with caution when assessing autonomic nervous system changes.

24/3,K/6 (Item 6 from file: 149)  
DIALOG(R)File 149:TGG Health&Wellness DB(SM)  
(c) 2003 The Gale Group. All rts. reserv.  
01493278 SUPPLIER NUMBER: 15824041 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
The effects of selected stimulus waveforms on pulse and phase  
characteristics at sensory and motor thresholds.  
Kantor, Gideon; Alon, Gad; Ho, Henry S.  
Physical Therapy, v74, n10, p59(12)  
Oct,  
1994  
PUBLICATION FORMAT: Magazine/Journal ISSN: 0031-9023 LANGUAGE: English  
RECORD TYPE: Fulltext; Abstract TARGET AUDIENCE: Professional  
WORD COUNT: 4752 LINE COUNT: 00399  
... common in clinical practice. Thus, establishing minimum values of  
stimulus characteristics, at thresholds that excite peripheral nerves  
of both the upper and lower extremities, may help clinicians in setting  
these waveform levels. The data may also help to identify potential  
advantages and disadvantages of each waveform and may indicate whether  
there is a preferred waveform for excitation. In addition, the safety of  
stimulation may depend in part on stimulus waveform .[2]

The purpose of our investigation was to document the effect of five waveforms on...

...variables: peak current, peak voltage, phase charge, and total pulse charge during threshold excitation of peripheral nerves in the forearm arm and leg. The data were used to establish minimum values for...

...integrated over phase duration, namely between two zero crossings) was calculated by the computer through digital integration using the formula  $[Q_{sub.P}] = It$ , where  $[Q_{sub.P}]$  represents the phase... Our data verified the clinical observation that many different waveforms can be used to excite peripheral nerves. [1,16-19] The results are in agreement with those of Johnston and Kasper, [10] who stimulated a frog nerve-muscle preparation and reported that all five studied waveforms induced very similar compound action potentials. Our data, however, demonstrate that the five waveforms had diverse effects on stimulus peak voltage, peak current, phase charge, and total pulse charge... indications that phase charge is the least affected variable of the waveform during excitation of peripheral nerves at various levels of intensity. This conclusion was implied by Laquicque and Weiss, according to...

...as part of any research. Doing so will permit comparisons among studies that used different waveforms to stimulate peripheral nerves.

We believe that considering and reporting only peak current (or peak voltage) and phase duration (as is usually done) may not allow comparison of data concerning excitation of peripheral nerves. Not knowing the shape of the waveform and whether the stimulus is generated as constant voltage or constant current may provide for...

...is likely to be the most consistent and thus reproducible stimulus characteristic of the different waveforms. Furthermore, the repeatability of phase charge values has been demonstrated to be independent of three... on these findings, we believe that the SBP waveform may be the preferred waveform for peripheral nerve stimulation. Not only does the SBP waveform minimize the total pulse charge, and thus the electrical energy involved in the stimulation, but...

...in the clinic. It seems that if the physiological objective of stimulation is to excite peripheral nerves, then one waveform should be enough to achieve the desired effect. The presence of redundant waveforms only complicates the decision-making process of the clinician and probably adds unnecessarily to the cost of the stimulator. Redundant waveforms also do not appear to have an advantage in the elicitation of strong muscle contractions...

...the studied variables and should be reported if the objective of stimulation is to excite peripheral nerves. Adding phases to the SBP pulse by creating 10-SP, 25-SP, or AM wave @ forms does not enhance the excitation, although it increases the total pulse charge dramatically. We thus conclude that the SBP waveform may be the preferred waveform for excitation of peripheral nerves. We likewise conclude that irrespective of waveform, the motor threshold requires higher stimulus characteristics than the sensory threshold and the leg thresholds... Eng. 1979;26: 69-75.

[14] Kantor G, Alon G, Ho HS. Threshold excitation of peripheral nerves with human subjects. In: Proceedings of the 12th Annual International IEEE-EMBS Conference. 1989:1660-1661. [15] Kantor G, Alon G, Ho HS. Charges associated with threshold excitation of peripheral nerves using various waveforms. In: Proceedings of the 11th Annual international IEEE-EMBS Conference. [16] Snyder-Mackler L, Garrett...

...International IEEE-EMBS Conference. [23] Kantor G, Alon G, Ho HS. Phase charge significance in peripheral nerve excitation with constant voltage and constant current stimulation. In: Proceedings of the 15th Annual International...

24/3,K/14 (Item 14 from file: 442)  
DIALOG(R) File 442:AMA Journals  
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00039211

Copyright (C) 1985 American Medical Association  
Classification of Carotid Bifurcation Disease Using Quantitative Doppler  
Spectrum Analysis (PAPERS READ BEFORE THE EIGHTH ANNUAL SURGICAL SYMPOSIUM  
OF THE ASSOCIATION OF VETERANS ADMINISTRATION SURGEONS, LOS ANGELES, MAY  
9-12, 1984 )

BANDYK, DENNIS F.; LEVINE, ARNOLD W.; POHL, LINDA; TOWNE, JONATHAN B.

Archives of Surgery

March, 1985; 120: 306-314 1985;

LINE COUNT: 00527 WORD COUNT: 07286

... vessel occlusion. (Ref. 2,4) These results have been obtained using relatively simple instrumentation with analog waveform analysis or audible interpretation of the Doppler signal, and emphasize that the potential diagnostic...

... be adjusted to any horizontal height on the Doppler waveform, such as peak frequency, and digital calculation of that frequency is displayed. In addition, the frequency v amplitude content of the...classification of disease severity does allow the physician to select from available angiographic techniques (intravenous digital subtraction arteriography (DSA), intra-arterial DSA, conventional contrast angiography) the method most likely to accurately...

#### CITED REFERENCES:

...duplex scanning with pulsed Doppler spectrum analysis.

To answer Dr Hobson's query of which waveform parameters are most reliable in predicting disease requires the use of receiveroperator curve analysis, which...

...the assessment of systolic window was qualitative. We did analyze the frequency content of the waveforms in specific circumstances usually in the less than 50% stenosis category. It has been shown experimentally that the systolic window is useful in differentiating minimal disease and stenosis less than 40%. For stenosis greater than 50%, criteria of disease categorization are based the degree of lumen reduction using spectra criteria. When waveform measurements arise on the border of the category criteria values, such as a peak frequency...

File 71:ELSEVIER BIOBASE 1994-2003/Feb W3  
 File 143:Biol. & Agric. Index 1983-2003/Jan  
 File 172:EMBASE Alert 2003/Feb W3  
 File 266:FEDRIP 2003/Dec  
 File 315:ChemEng & Biotec Abs 1970-2002/Dec  
 File 358:Current BioTech Abs 1983-2002/Dec

Set	Items	Description
S1	153086	NERVOUS()SYSTEM OR (AUTONOMIC OR PERIPHERAL)()NERV???
S2	3228	WAVE()(SHAPE OR SHAPES OR FORM OR FORMS) OR WAVEFORM? ? OR WAVESHAPE? ?.
S3	195	(ANALOG OR ANALOGUE) (2W) (SIGNAL? ? OR PULSE OR PULSES OR IMPULSE? ?)
S4	219	DAC OR DIGITAL(2W)ANALOG()CONVER????
S5	161	ANALOG(2W)DIGITAL()CONVER????
S6	2461	ANS OR PNS
S7	1114	DIGITAL AND (ANALOG OR ANALOGUE)
S8	97671	CONVERT??? OR CONVERSION? ?
S9	191232	NERV???
S10	694	(S1 OR S6 OR S9) AND S2:S3
S11	5	S4 AND S5
S12	0	S10AND S11
S13	0	S10 AND S11
S14	1	S10 AND S7 AND S8
S15	2	(S10 AND S7) NOT S14

14/7/1 (Item 1 from file: 71)  
DIALOG(R)File 71:ELSEVIER BIOBASE  
(c) 2003 Elsevier Science B.V. All rts. reserv.  
00984688 1998230147  
Posttreatment with propofol terminates lidocaine-induced epileptiform  
electroencephalogram activity in rabbits: Effects on cerebrospinal fluid  
dynamics  
Momota Y.; Artru A.A.; Powers K.M.; Mautz D.S.; Ueda Y.  
ADDRESS: Dr. A.A. Artru, Department of Anesthesiology, Box 356540, Univ. of  
Washington School of Med., 1959 NE Pacific St., Seattle, WA  
98195-6540, United States  
EMAIL: artruaa@u.washington.edu  
Journal: Anesthesia and Analgesia, 87/4 (900-906), 1998, United States  
CODEN: AACRA  
ISSN: 0003-2999  
DOCUMENT TYPE: Article  
LANGUAGES: English SUMMARY LANGUAGES: English  
NO. OF REFERENCES: 22  
There are no controlled studies to determine whether propofol given after  
the onset of lidocaine-induced seizures (posttreatment) stops  
lidocaine-induced seizures. In this study, we determined whether  
posttreatment with propofol abolishes lidocaine-induced epileptiform  
electroencephalogram (EEG) activity as effectively as does midazolam, and  
cerebrospinal fluid (CSF) dynamics during lidocaine-induced epileptiform  
EEG activity and its treatment. EEG activity and CSF dynamics were  
determined in two groups of anesthetized rabbits at each of four  
experimental conditions: baseline. lidocaine-induced epileptiform activity,  
treatment with midazolam (n = 6) or propofol (n = 6), and return to  
baseline. The analog EEG signal was converted into a set of digital  
parameters using aperiodic analysis, and CSF dynamics were determined using  
ventriculocisternal perfusion. Propofol (3.8 +/- 1.3 mg/kg) stopped  
epileptiform activity, as did midazolam (2.0 +/- 1.7 mg/kg). The rates of  
CSF formation or reabsorption and resistances to CSF reabsorption or flow  
at the arachnoid villi did not differ among conditions or between groups.  
Our results indicate that propofol and midazolam both terminate  
epileptiform activity without changing CSF dynamics. Implications: Propofol  
may be an alternative to benzodiazepines for treating lidocaine- induced  
epileptiform electroencephalogram activity in patients.

15/6/1 (Item 1 from file: 71)  
01563406 2000222835  
Restricting exposure to pulsed and broadband magnetic fields

15/7/2 (Item 2 from file: 71)  
DIALOG(R)File 71:ELSEVIER BIOBASE  
(c) 2003 Elsevier Science B.V. All rts. reserv.  
00550589 97050847  
Cortical DC potential shifts accompanying the central processing of  
visually presented analogue and digital time displays  
Ebenbichler G.; Uhl F.; Lang W.; Lindinger G.; Egkher A.; Deecke L.  
ADDRESS: Dr. G. Ebenbichler, Dept. Physical Medicine Rehabilitat.,  
Wahringer Gurtel 18-20, 1090 Vienna, Austria  
Journal: Neuropsychologia, 35/3 (349-357), 1997, United Kingdom  
PUBLICATION DATE: 19970000  
CODEN: NUPSA  
ISSN: 0028-3932

PUBLISHER ITEM IDENTIFIER: S0028393296000875

DOCUMENT TYPE: Article

LANGUAGES: English

SUMMARY LANGUAGES: English

NO. OF REFERENCES: 38

According to studies in brain-lesioned patients, the cortical substrate subserving the reading of digitally presented time displays seems to differ from that of reading analogue displays. While the right hemisphere has been assumed to be important for reading analogue displays, reading digital displays is attributed to the left hemisphere. This study attempts to localize the cortical substrate of reading analogue versus digital time displays in the intact human brain using scalp-recorded event-related slow negative DC potential shifts. In the arithmetic tasks, subjects had to judge whether or not the time conveyed by the last out of three tachistoscopically presented ( analogue or digital ) slides was the exact difference between the time conveyed by the first and the second slide. In the control condition, subjects only had to attend to ( analogue or digital ) time displays. With analogue slides, frontolateral recording sites revealed a right hemispheric preponderance of DC shifts measured in the interval between the second and third slide. Anterior temporal recording sites revealed a right hemispheric preponderance only when calculations were performed. By contrast, there was no hemispheric lateralization with digital slides. The arithmetic versus control manipulation modulated waveforms , but did not influence hemispheric laterality.

File 135:NewsRx Weekly Reports 1995-2003/Feb W2

File 369:New Scientist 1994-2003/Feb W2

File 370:Science 1996-1999/Jul W3

Set	Items	Description
S1	3561	NERVOUS()SYSTEM OR (AUTONOMIC OR PERIPHERAL)()NERV???
S2	165	WAVE() (SHAPE OR SHAPES OR FORM OR FORMS) OR WAVEFORM? ? OR WAVESHAPE? ?
S3	57	(ANALOG OR ANALOGUE) (2W) (SIGNAL? ? OR PULSE OR PULSES OR I-MPULSE? ?)
S4	14	DAC OR DIGITAL (2W)ANALOG()CONVER????
S5	7	ANALOG (2W)DIGITAL()CONVER????
S6	35	ANS OR PNS
S7	5733	NERV???
S8	258	(ANALOG OR ANALOGUE) AND DIGITAL
S9	4067	CONVERT??? OR CONVERSION? ?
S10	19	(S1 OR S6 OR S7) AND S2:S3
S11	0	S4 AND S5
S12	3	S8 AND S10
S13	3	RD (unique items)

13/6/1 (Item 1 from file: 369)  
00135434 mgl17623704.700 (USE FORMAT 7 OR 9 FOR FULLTEXT)  
Second sight  
November 23, 2002  
WORD COUNT: 2433

13/3,K/2 (Item 1 from file: 370)  
DIALOG(R)File 370:Science  
(c) 1999 AAAS. All rts. reserv.  
00500849 (USE 9 FOR FULLTEXT)  
Distinct Mechanisms for Synchronization and Temporal Patterning of  
Odor-Encoding Neural Assemblies  
MacLeod, Katrina; Laurent, Gilles  
California Institute of Technology, Biology Division, 139-74, Pasadena, CA  
91125, USA.  
Science Vol. 274 5289 pp. 976  
Publication Date: 11-08-1996 (961108) Publication Year: 1996  
Document Type: Journal. ISSN: 0036-8075  
Language: English  
Section Heading: Reports  
Word Count: 2764

(THIS IS THE FULLTEXT)

...Text: odors puffed on an antenna cause the synchronization of groups of antennal lobe projection neurons ( PNs ) (the functional analogs of vertebrate olfactory bulb mitral-tufted cells), resulting in 20-to 30-Hz local field potential (LFP) oscillations in the mushroom body (the functional analog of the piriform cortex) and in subthreshold oscillatory responses in its intrinsic neurons, the Kenyon cells (KCs) (B7) . Although odor puffs evoke long oscillatory LFP bursts, individual PNs generally participate in the synchronized ensembles only for short epochs, but at times that are...

...bursts of odor-evoked LFP oscillations therefore result from dynamic neural ensembles whose components (the PNs ) phase-lock transiently to one another and change reliably during a single odor response (B2...

...system (B6) , we studied directly the role of local neurons (LNs) in synchronizing groups of PNs in the antennal lobe of the locust olfactory system....

...the periodic depolarization in LNs corresponds precisely to that of the periodic hyperpolarization in postsynaptic PNs , and showed directly that LNs lead PNs by a quarter period (96.Deg. +/- 53.Deg., mean +/- SD; n = 164 cycles), as predicted...

...bulb circuits (B9) . Injecting depolarizing current directly into individual LNs evoked sustained inhibition in postsynaptic PNs (Fig. 1C). Transmitter release from LNs was spike independent (B10) and graded (B11) . Hyperpolarizing one...

...immunocytochemistry and electron microscopy revealed the existence of direct GABAergic contacts onto the dendrites of PNs in the antennal lobe (B12...

...To examine directly whether inhibition by LNs underlies the synchronized oscillatory responses of PNs , we injected picrotoxin (PCT, an antagonist of ionotropic GABA receptors) locally in the antennal lobe...

...oscillations in the mushroom body, indicating oscillatory responses in odor-specific sets of antennal lobe PNs , of which one was recorded intracellularly (Fig. 2A). The transient synchronization between this PN and the periodic IPSPs caused in PNs by LNs (Fig. 2, A and B), and the periodic cross-correlation pattern between LFP and PNs (Fig. 2B) within a minute of the injection (n = 6). PCT, however, never suppressed the



response of PNs to odors that normally activated them (Fig. 2B). The suppression of odor-evoked LFP oscillations by PCT, therefore, resulted not from a silencing of the PNs, but most likely from their desynchronization, caused by the block of GABA-mediated inhibition. This...  
 ...6) also did not block the odor-induced LFP oscillations or the oscillatory responses of PNs (Fig. 2D), indicating that PN synchronization does not depend on inhibitory feedback in the mushroom...  
 ...its intrinsic neurons, the KCs, receive direct GABA-containing inputs from neurons other than the PNs (B12) (B16). Inhibition in the mushroom body might thus also contribute to synchronization of the KCs receiving coherent inputs from PNs. To examine this idea, we superfused the brain with PCT, thus blocking inhibition both in...  
 ...after PCT application, odor-evoked oscillations disappeared in the LFP because of the desynchronization of PNs in the antennal lobe (Fig. 3, A and B). A few minutes later, however, odor...  
 ...PNs generally respond to odors with complex temporal firing patterns that often include discrete periods of...  
 ...by inhibition, also depend on PCT-sensitive inhibition in the antennal lobe. Two examples of PNs with such responses and of the effects of PCT on these responses are shown in...  
 ...at millimolar concentrations abolished the LN-mediated periodic IPSPs (arrowheads) and synchronized firing of the PNs (resulting in suppression of LFP oscillations), PCT had no qualitative effect on the temporal response patterns of the PNs (Fig. 4). Even though the LN-mediated IPSPs responsible for PN synchronization disappeared in PCT...  
 ...histograms of spike activity constructed from repeated presentations of an odor (Fig. 4) (n = 17 PNs). The odor- and neuron-specific modulation of firing observed in PNs is therefore caused by mechanisms independent of PCT-sensitive GABA-mediated inhibition...  
 ...the locust antennal lobe does not, however, underlie the temporal response patterns expressed by individual PNs. Although slow-response patterns can also be observed in vertebrate mitral cells in vivo (B23... Most importantly, the odor-specific temporal firing patterns of PNs do not depend on LN-mediated PCT-sensitive inhibition. They may result from slower antennal...  
 ...injection in the antennal lobe selectively abolishes the oscillatory synchronization but not the responsiveness of PNs. [(A) to (D)] (top trace) LFP from mushroom body; (middle) simultaneous intracellular recording from antennal...  
 ...during the odor response. The oscillatory LFP indicates synchronized and rhythmic firing of many other PNs during the odor response. The cross-correlation between PN and LFP shows a striped pattern...  
 ...injection of PCT into the calyx of the mushroom body (where the axonal collaterals of PNs terminate) does not affect either the responsiveness of PNs to odors or their synchronization (assessed from the LFP oscillations or the periodic cross-correlation...  
 ...the same animal rapidly eliminates the LFP oscillations, as a result of the desynchronization of PNs in the antennal lobe (Fig. 2). (C) Seven minutes later, odor puffs now evoke bursts...  
 ...inset), whose power spectrum also shows a peak at 24 Hz, despite the desynchronization of PNs. Calibrations (insets): horizontal, 1 s; vertical, 500 ( $\mu$ ) V...5 mM) abolishes PN synchronization but does not affect odor-specific temporal response patterns of PNs. Compare the slow response patterns of two different PNs (A and B) recorded intracellularly in vivo before (i and iii) and after (ii and...  
 ...oscillations (caused by synchronized PN activity) and the trains of rhythmic IPSPs visible in individual PNs [arrowheads in (i)], the timing

and duration of firing of the PNs are not altered, even when periods of inhibition appear to be caused by the PCT...

#### References and Notes:

...et al., J. Comp. Physiol. 173A, 385 (1993)]. Evidence that transmitter release from LNs to PNs does not require sodium action potentials corroborates results in the turtle olfactory bulb, where depolarized...  
...LN to PN and PN to LN), indicating that LNs also inhibit each other, that PNs likely excite each other, and that PNs excite LNs...  
...43 experiments). The mechanical effect of injection was usually small, allowing maintained intracellular impalement of PNs. We checked that drug diffusion was restricted to the selected neuropils (probably because of efficient...14. Electrophysiological data (PN and LFP) were digitized post hoc from Digital Audio Tape with LabVIEW software and an NBMI016L interface (National Instruments, Austin, TX). Sliding cross...  
...data (LFP and membrane potential), the large variations of potential caused by PN action potential waveforms needed to be weighted down for pictorial representation. We thus artificially eliminated all PN action  
...resulting in a continuous signal of amplitude, timing, and shape similar to the subthreshold synaptic waveform underlying each action potential. The periodic structure of cross-correlations calculated with the full-spike waveform was identical, except for the increased dynamic range of the cross-correlation function, rendering the...  
...from feedback inhibitory neurons activated by KCs or from feedforward inhibitory neurons excited by the PNs . ;

13/3,K/3 (Item 2 from file: 370)

DIALOG(R)File 370:Science

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00500596 (USE 9 FOR FULLTEXT)

Cardiovascular Regulation in Mice Lacking  $\alpha_1$ -Adrenergic Receptor Subtypes b and c

Link, Richard E.; Desai, Kavin; Hein, Lutz; Stevens, Mary E.; Chruscinski, Andrzej; Bernstein, Daniel; Barsh, Gregory S.; Kobilka, Brian K.  
R. E. Link and A. Chruscinski, Department of Molecular and Cellular Physiology, Stanford University, Stanford, CA 94305, USA. ; K. Desai and D. Bernstein, Department of Pediatrics, Stanford University, Stanford, CA 94305, USA. ; L. Hein, Division of Cardiovascular Medicine, Stanford University, Stanford, CA 94305, USA. ; M. E. Stevens, Howard Hughes Medical Institute, Stanford University, Stanford, CA 94305, USA. ; G. S. Barsh, Departments of Pediatrics and Genetics, and Howard Hughes Medical Institute, Stanford University, Stanford, CA 94305, USA. ; B. K. Kobilka, Department of Molecular and Cellular Physiology, Howard Hughes Medical Institute, and Division of Cardiovascular Medicine, Stanford University, Stanford, CA 94305, USA.

Science Vol. 273 5276 pp. 803

Publication Date: 8-09-1996 (960809) Publication Year: 1996

Document Type: Journal ISSN: 0036-8075

Language: English

Section Heading: Reports

Word Count: 1247

(THIS IS THE FULLTEXT)

...Abstract: counteracted the clinically beneficial hypotensive effect of stimulating  $\alpha_1$  receptors in the central nervous system. There were no hemodynamic effects produced by disruption of the  $\alpha_1$  subtype. These...

...Text: the therapeutic antihypertensive effect of drugs acting at

a.inf(2a) receptors in the central nervous system .

References and Notes:

- ...1. The a.inf(2c) subtype is expressed primarily in the central nervous system , although small amounts are present in kidney (B18) . The a.inf(2b) subtype is expressed...
- ...highest amounts in kidney. The a.inf(2a) subtype is expressed widely throughout both the nervous system and peripheral tissues. The identity of the a.inf(2)AR subtypes present on resistance...to a Spectramed DTX Plus pressure transducer with a side port for infusing medications. The analog input was amplified with a Gould (Cleveland, OH) model 11-1202-25 preamplifier and model 13-4615-52 amplifier and digitized with a Data Translation (Marlboro, MA) DT2801 analog -to-digital converter. The waveform was analyzed to derive mean blood pressure and heart rate through use of Dataflow data...

Set	Items	Description
S1	11661	WAVE() FORM ? OR WAVEFORM? ?
S2	2420	'RODS (RETINA)' OR 'SENILE PLAQUES' OR 'SUBSTANTIA GELATINOSA' OR 'SYMPATHETIC FIBERS, POSTGANGLIONIC' OR R6:R50
S3	54898	'AXONS' OR DC='A11.284.180.75.' OR DC='A11.671.137.' OR DC='A8.663.542.145.' OR 'GROWTH CONES' OR 'MOSSY FIBERS, HIPPOCAMPAL' OR 'NEURITES' OR 'PRESYNAPTIC TERMINALS'
S4	11869	'GANGLIA, AUTONOMIC' OR DC='A8.340.315.' OR DC='A8.800.50.-300.' OR 'AUTONOMIC GANGLIA' OR R7:R10
S5	713	'SPIRAL GANGLION' OR DC='A8.340.390.800.' OR DC='A8.800.35-0.800.' OR DC='A8.800.800.120.910.120.800.' OR DC='A9.246.631-.246.900.' OR 'GANGLION OF CORTI'
S6	17461	'VAGUS NERVE' OR R2:R8 OR R13:R15
S7	2135	'HYPOGLOSSAL NERVE' OR DC='A8.800.800.120.330.' OR 'CRANIAL NERVE XII' OR 'TWELFTH CRANIAL NERVE'
S8	17426	'AFFERENT NEURONS,' (NEURONS, AFFERENT)
S9	326	S1 AND S2
S10	82053	'AUTONOMIC NERVOUS SYSTEM' OR DC='A8.800.50.' OR R6:R29
S11	58	S9 AND S10
S12	211	(ANALOG AND DIGITAL) (3W) CONVERTER? ?
S13	0	S11 AND S12
S14	0	S9 AND S10
S15	2225	ANALOG AND DIGITAL
S16	0	S9 AND S10
S17	5	S11/2003 OR S11/2002 OR S11/2001
S18	53	S11 NOT S12
S19	53	RD (unique items)

19/8/1

DIALOG(R)File 155:(c) format only 2003 The Dialog Corp. All rts. reserv.

10990527 20572341 PMID: 11123706

**Opioid-receptor-mediated excitation of rat mesenteric afferent fibres supplying the rat jejunum.**

Dec 2000

Tags: Animal; Male; Support, Non-U.S. Gov't

Descriptors: Jejunum--innervation--IR; \*Neurons, Afferent--physiology--PH; \*Receptors, Opioid--physiology--PH; \* **Vagus Nerve** --chemistry--CH; \* **Vagus Nerve** --physiology--PH; 3,4-Dichloro-N-methyl-N-(2-(1-pyrrolidinyl)-cyclohexyl)-benzeneacetamide, (trans)-Isomer--pharmacology--PD; Analgesics, Non-Narcotic--pharmacology--PD; Analgesics, Opioid--pharmacology--PD; Dose-Response Relationship, Drug; Enkephalin, Ala(2)-MePhe(4)-Gly(5)--pharmacology--PD; Enkephalin, Leucine-2-Alanine--pharmacology--PD; Rats; Rats, Wistar; Vagotomy; **Vagus Nerve** --cytology--CY

CAS Registry No.: 0 (Analgesics, Non-Narcotic); 0 (Analgesics, Opioid); 0 (Receptors, Opioid); 100929-53-1 (Enkephalin, Ala(2)-MePhe(4)-Gly(5)-); 63631-40-3 (Enkephalin, Leucine-2-Alanine); 67198-13-4 (3,4-Dichloro-N-methyl-N-(2-(1-pyrrolidinyl)-cyclohexyl)-benzeneacetamide, (trans)-Isomer)

19/8/2

DIALOG(R)File 155:(c) format only 2003 The Dialog Corp. All rts. reserv.

10986588 20564444 PMID: 11110807

**BK-Type K(Ca) channels in two parasympathetic cell types: differences in kinetic properties and developmental expression.**

Dec 2000

Tags: Animal; Support, U.S. Gov't, P.H.S.

Descriptors: **Ganglia, Parasympathetic** --metabolism--ME; \*Neurons --metabolism--ME; \*Potassium Channels--metabolism--ME; Calcium--metabolism--ME; Calcium--pharmacology--PD; Cell Size; Cells, Cultured; Chick Embryo; Choroid--chemistry--CH; Choroid--embryology--EM; Choroid--innervation--IR; Ciliary Body--chemistry--CH; Ciliary Body--embryology--EM; Ciliary Body --innervation--IR; Dose-Response Relationship, Drug; **Ganglia, Parasympathetic** --cytology--CY; **Ganglia, Parasympathetic** --embryology--EM; Ion Channel Gating--drug effects--DE; Membrane Potentials--drug effects --DE; Membrane Potentials--physiology--PH; Neurons--classification--CL; Neurons--cytology--CY; Patch-Clamp Techniques; Potassium--metabolism--ME; Potassium--pharmacokinetics--PK; Tissue Extracts--pharmacology--PD

CAS Registry No.: 0 (Potassium Channels); 0 (Tissue Extracts); 0 (large-conductance calcium-activated potassium channel); 7440-09-7 (Potassium); 7440-70-2 (Calcium)

19/8/3

DIALOG(R)File 155:(c) format only 2003 The Dialog Corp. All rts. reserv.

10959226 20521883 PMID: 11067984

**G-protein-modulated Ca(2+) current with slowed activation does not alter the kinetics of action potential-evoked Ca(2+) current.**

Nov 2000

Tags: Animal; Support, Non-U.S. Gov't; Support, U.S. Gov't, P.H.S.

Descriptors: \*Action Potentials--physiology--PH; \*Calcium--metabolism--ME; \*Calcium Channels, N-Type--physiology--PH; \*GTP-Binding Proteins --metabolism--ME; Action Potentials--drug effects--DE; Chick Embryo; **Ganglia, Parasympathetic** --cytology--CY; **Ganglia, Parasympathetic** --physiology--PH; Guanosine 5'-O-(3-Thiotriphosphate)--pharmacology--PD; Kinetics; Neurons--chemistry--CH; Neurons--physiology--PH; Reaction Time --drug effects--DE; Reaction Time--physiology--PH

CAS Registry No.: 0 (Calcium Channels, N-Type); 37589-80-3 (Guanosine 5'-O-(3-Thiotriphosphate)); 7440-70-2 (Calcium)

Enzyme No.: EC 3.6.1.- (GTP-Binding Proteins)

19/8/4

DIALOG(R)File 155:(c) format only 2003 The Dialog Corp. All rts. reserv.

10815477 20350173 PMID: 10892252

**Analysis of respiratory sinus arrhythmia with respect to respiratory phase.**

Jun 2000

Tags: Human; Male; Support, Non-U.S. Gov't

Descriptors: \*Arrhythmia, Sinus--physiopathology--PP; \*Electrocardiography; \*Heart Rate--physiology--PH; \*Pulmonary Ventilation--physiology--PH; \*Signal Processing, Computer-Assisted; Adult; Fourier Analysis; Heart--innervation--IR; Vagus Nerve --physiopathology--PP

19/8/5

DIALOG(R)File 155:(c) format only 2003 The Dialog Corp. All rts. reserv.

10782026 20341872 PMID: 10884302

**Elimination of the fast transient in superior cervical ganglion neurons with expression of KV4.2W362F: molecular dissection of IA.**

Jul 15 2000

Tags: Animal; Support, U.S. Gov't, Non-P.H.S.; Support, U.S. Gov't, P.H.S.

Descriptors: Neurons--metabolism--ME; \*Potassium Channels--biosynthesis--BI; \* Superior Cervical Ganglion --metabolism--ME; Action Potentials; Adaptation, Physiological; Biostatistics; Cell Count; Cells, Cultured; Coculture; Ion Transport--physiology--PH; Luminescent Proteins--biosynthesis--BI; Luminescent Proteins--genetics--GE; Mutagenesis, Site-Directed; Neuroglia--cytology--CY; Neurons--cytology--CY; Patch-Clamp Techniques; Potassium--metabolism--ME; Potassium Channels--genetics--GE; Rats; Rats, Long-Evans; Recombinant Proteins--biosynthesis--BI; Recombinant Proteins--genetics--GE; Superior Cervical Ganglion --cytology--CY

CAS Registry No.: 0 (Luminescent Proteins); 0 (Potassium Channels); 0 (Recombinant Proteins); 0 (Shal2 protein); 147336-22-9 (green fluorescent protein); 7440-09-7 (Potassium)

19/8/6

DIALOG(R)File 155:(c) format only 2003 The Dialog Corp. All rts. reserv.

10664204 20199574 PMID: 10737313

**Glottographic phase difference in recurrent nerve paralysis.**

Mar 2000

Tags: Human; Male; Support, U.S. Gov't, P.H.S.

Descriptors: Recurrent Laryngeal Nerve --physiopathology--PP; \*Vocal Cord Paralysis--physiopathology--PP; Adult; Aged; Electromyography--instrumentation--IS; Electromyography--methods--MT; Glottis--innervation--IR; Middle Age; Predictive Value of Tests; Reference Values; Reproducibility of Results; Time Factors; Vocal Cord Paralysis--diagnosis--DI

19/8/7

DIALOG(R)File 155:(c) format only 2003 The Dialog Corp. All rts. reserv.

10575614 20116713 PMID: 10653012

**Cilansetron acts at its site of absorption to antagonize the sensitivity of mesenteric afferent fibres to 5-hydroxytryptamine in the rat jejunum.**

Jan 14 2000

Tags: Animal; Male; Support, Non-U.S. Gov't

Descriptors: Carbazoles--pharmacology--PD; \* Enteric Nervous System --drug effects--DE; \*Jejunum--innervation--IR; \*Neurons, Afferent--drug effects--DE; \*Pyridines--pharmacology--PD; \*Serotonin--pharmacology--PD; \*Serotonin Antagonists--pharmacology--PD; Absorption; Administration, Topical; Carbazoles--pharmacokinetics--PK; Dose-Response Relationship, Drug; Electrophysiology; Enteric Nervous System --cytology--CY; Enteric

**Nervous System** --physiology--PH; Injections, Intravenous; Nerve Fibers  
--drug effects--DE; Nerve Fibers--physiology--PH; Neurons, Afferent  
--physiology--PH; Pyridines--pharmacokinetics--PK; Rats; Rats, Wistar;  
Serotonin Antagonists--pharmacokinetics--PK  
CAS Registry No.: 0 (Carbazoles); 0 (Pyridines); 0 (Serotonin  
Antagonists); 120635-74-7 (cilansetron); 50-67-9 (Serotonin)

19/8/8

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10120728 99102503 PMID: 9882744

**Variations in onset of action potential broadening: effects on calcium current studied in chick ciliary ganglion neurones.**

Feb 1 1999

Tags: Animal; Support, Non-U.S. Gov't; Support, U.S. Gov't, P.H.S.

Descriptors: Action Potentials--physiology--PH; \*Calcium Channels  
--physiology--PH; \*Ganglia, **Parasympathetic** --physiology--PH; \*Neurons  
--physiology--PH; Calcium--metabolism--ME; Cells, Cultured; Chick Embryo;  
Electric Stimulation; Electrophysiology; **Ganglia, Parasympathetic**  
--cytology--CY; Kinetics; Membrane Potentials--physiology--PH; Patch-Clamp  
Techniques; Xenopus

CAS Registry No.: 0 (Calcium Channels); 7440-70-2 (Calcium)

19/8/9

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10087867 99050879 PMID: 9835215

**Serotonin and cholecystokinin activate different populations of rat mesenteric vagal afferents.**

Oct 16 1998

Tags: Animal; Male

Descriptors: Cholecystokinin--pharmacology--PD; \*Jejunum--innervation--IR  
; \*Neurons, Afferent--drug effects--DE; \*Serotonin--pharmacology--PD; \*  
**Vagus Nerve** --drug effects--DE; Cholecystokinin--antagonists and  
inhibitors--AI; Devazepide--pharmacology--PD; Electrophysiology; Granisetro  
n--pharmacology--PD; Hormone Antagonists--pharmacology--PD; Neurons,  
Afferent--physiology--PH; Rats; Rats, Wistar; Serotonin Antagonists  
--pharmacology--PD; **Vagus Nerve** --cytology--CY

CAS Registry No.: 0 (Hormone Antagonists); 0 (Serotonin Antagonists);  
103420-77-5 (Devazepide); 109889-09-0 (Granisetron); 50-67-9  
(Serotonin); 9011-97-6 (Cholecystokinin)

19/8/10

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10065195 99048980 PMID: 9832140

**Presynaptic inhibition by concanavalin A: are alpha-latrotoxin receptors involved in action potential-dependent transmitter release?**

Dec 1998

Tags: Animal; Support, Non-U.S. Gov't

Descriptors: Concanavalin A--pharmacology--PD; \*Neural Inhibition;  
\*Neurotransmitters--metabolism--ME; \* **Presynaptic Terminals** --drug effects  
--DE; \*Receptors, Peptide--physiology--PH; Action Potentials--physiology  
--PH; Adrenergic alpha-Agonists--pharmacology--PD; Calcium--physiology--PH;  
Cattle; Chickens; Electric Stimulation; Electrophysiology; Neural  
Inhibition--physiology--PH; Neurons--drug effects--DE; Neurons--metabolism  
--ME; Neurons--physiology--PH; Norepinephrine--antagonists and inhibitors  
--AI; Norepinephrine--metabolism--ME; Quinoxalines--pharmacology--PD;  
**Sympathetic Nervous System** --cytology--CY; **Sympathetic Nervous System**  
--drug effects--DE; **Sympathetic Nervous System** --metabolism--ME

CAS Registry No.: 0 (Adrenergic alpha-Agonists); 0 (Neurotransmitters)  
; 0 (Quinoxalines); 0 (Receptors, Peptide); 0 (alpha-latrotoxin  
receptor); 11028-71-0 (Concanavalin A); 51-41-2 (Norepinephrine);  
59803-98-4 (brimonidine); 7440-70-2 (Calcium)

19/8/11

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09849904 98261636 PMID: 9596794

**Sensitivity to 5-hydroxytryptamine in different afferent subpopulations within mesenteric nerves supplying the rat jejunum.**

Jun 15 1998

Tags: Animal; Male; Support, Non-U.S. Gov't

Descriptors: **Enteric Nervous System** --cytology--CY; \*Jejunum --innervation--IR; \*Neurons, Afferent--drug effects--DE; \*Serotonin --pharmacology--PD; Action Potentials--drug effects--DE; Anesthetics, Local --pharmacology--PD; Cholinergic Antagonists--pharmacology--PD; Electrophysiology; **Enteric Nervous System** --drug effects--DE; Ganglionic Blockers --pharmacology--PD; Hexamethonium--pharmacology--PD; Hydrochloric Acid --pharmacology--PD; Lidocaine--pharmacology--PD; Physical Stimulation; Rats ; Rats, Wistar; Stress, Mechanical; Vagotomy

CAS Registry No.: 0 (Anesthetics, Local); 0 (Cholinergic Antagonists) ; 0 (Ganglionic Blockers); 137-58-6 (Lidocaine); 50-67-9 (Serotonin); 60-26-4 (Hexamethonium); 7647-01-0 (Hydrochloric Acid)

19/8/12

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09825022 98252562 PMID: 9591865

**Comparison of concentric needle versus hooked-wire electrodes in the canine larynx.**

May 1998

Tags: Animal; Comparative Study; Female; Male; Support, U.S. Gov't, P.H.S.

Descriptors: \*Electrodes, Implanted; \*Electromyography--instrumentation --IS; \*Larynx--physiology--PH; \*Needles; Action Potentials--physiology--PH; Analysis of Variance; Dogs; Electric Stimulation; Electrodes, Implanted --standards--ST; Electromyography--methods--MT; Equipment Design; Hematoma --pathology--PA; Laryngeal Diseases--pathology--PA; Laryngeal Muscles --injuries--IN; Laryngeal Muscles--pathology--PA; Laryngeal Muscles --physiology--PH; Laryngitis--pathology--PA; Larynx--injuries--IN; Larynx --pathology--PA; Movement; Needles--standards--ST; Rest; Signal Processing, Computer-Assisted; Stainless Steel; **Vagus Nerve** --physiology--PH; Vocal Cords--injuries--IN; Vocal Cords--pathology--PA

CAS Registry No.: 12597-68-1 (Stainless Steel)

19/8/13

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09623718 98038915 PMID: 9373078

**Respiratory activity of the rat posterior cricoarytenoid muscle.**

Nov 1997

Tags: Animal; Support, Non-U.S. Gov't

Descriptors: Laryngeal Muscles--physiology--PH; \* **Laryngeal Nerves** --physiology--PH; \*Phrenic Nerve--physiology--PH; \*Respiratory Mechanics --physiology--PH; Cell Compartmentation; Diaphragm--anatomy and histology --AH; Diaphragm--physiology--PH; Electromyography; Electrophysiology; Laryngeal Muscles--innervation--IR; **Laryngeal Nerves** --anatomy and histology--AH; Phrenic Nerve--anatomy and histology--AH; Rats; Rats, Sprague-Dawley

19/8/14

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09536063 97436641 PMID: 9292614

**Laryngeal evoked brainstem responses in humans: a preliminary study.**

Sep 1997



Tags: Animal; Female; Human; Male; Support, Non-U.S. Gov't  
Descriptors: Brain Stem--physiology--PH; \*Evoked Potentials--physiology--PH; \* **Laryngeal Nerves** --physiology--PH; \*Larynx--physiology--PH; Adult; Anesthetics, Local--administration and dosage--AD; Cranial Nerve Diseases--diagnosis--DI; Cranial Nerve Diseases--physiopathology--PP; Electrodes; Evoked Potentials--drug effects--DE; Hearing Loss, Sensorineural--physiopathology--PP; Hypopharynx--drug effects--DE; Hypopharynx--innervation--IR; Laryngeal Diseases--diagnosis--DI; Laryngeal Diseases--physiopathology--PP; **Laryngeal Nerves** --drug effects--DE; Lidocaine--administration and dosage--AD; Middle Age; Nerve Block; Neural Pathways--physiology--PH; Physical Stimulation; Reaction Time; Reproducibility of Results; Vibration

CAS Registry No.: 0 (Anesthetics, Local); 137-58-6 (Lidocaine)

19/8/15

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09441480 97349323 PMID: 9204942

**Temporal dynamics of graded synaptic transmission in the lobster stomatogastric ganglion.**

Jul 15 1997

Tags: Animal; Support, Non-U.S. Gov't; Support, U.S. Gov't, P.H.S.

Descriptors: **Ganglia**, Sympathetic --physiology--PH; \*Gastrointestinal System--physiology--PH; \*Synaptic Transmission--physiology--PH; **Ganglia**, Invertebrate--physiology--PH; Lobsters; Time Factors

19/8/16

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09158806 97055348 PMID: 8899635

**Simultaneous encoding of carotid sinus pressure and dP/dt by NTS target neurons of myelinated baroreceptors.**

Oct 1996

Tags: Animal; Male; Support, U.S. Gov't, Non-P.H.S.

Descriptors: Blood Pressure--physiology--PH; \*Carotid Sinus--physiology--PH; \*Myelin Sheath--physiology--PH; \*Neurons--physiology--PH; \* **Pressoreceptors** --physiology--PH; \*Solitary Nucleus--physiology--PH; Cardiovascular Physiology; Electric Stimulation; Models, Statistical; Rabbits; Respiration--physiology--PH; Solitary Nucleus--cytology--CY; Time Factors

19/8/17

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08898706 96247352 PMID: 8656962

**Intraoperative identification of laryngeal nerves with laryngeal electromyography.**

Jun 1996

Tags: Female; Human; Male

Descriptors: Electromyography--instrumentation--IS; \*Intubation, Intratracheal--instrumentation--IS; \* **Laryngeal Nerves** --physiopathology--PP; \*Monitoring, Intraoperative--instrumentation--IS; \*Parathyroidectomy--instrumentation--IS; \*Thyroidectomy--instrumentation--IS; Adult; Electric Stimulation--instrumentation--IS; Electrodes; **Laryngeal Nerves** --injuries--IN; Middle Age; Reaction Time--physiology--PH

19/8/18

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08807060 96154554 PMID: 8582074

**An analysis of vocal cord paralysis before and after Teflon injection using combined glottography.**

Oct 1995

Tags: Female; Human; Male  
Descriptors: \*Glottis--physiopathology--PP; \*Polytetrafluoroethylene;  
\*Prostheses and Implants; \*Vocal Cord Paralysis--physiopathology--PP; Adult  
; Aged; Aged, 80 and over; Electrodiagnosis; Fiber Optics; Laryngoscopy;  
Light--diagnostic use--DU; Middle Age; Phonation--physiology--PH;  
**Recurrent Laryngeal Nerve** --physiopathology--PP; Vibration; Vocal Cord  
Paralysis--surgery--SU; Vocal Cords--physiopathology--PP; Voice--physiology  
--PH  
CAS Registry No.: 9002-84-0 (Polytetrafluoroethylene)

19/8/19

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08639936 95387303 PMID: 7658382

**Calcium and sodium currents evoked by action potential waveforms in rat sympathetic neurones.**

May 15 1995

Tags: Animal; In Vitro; Support, U.S. Gov't, P.H.S.

Descriptors: Calcium Channels--physiology--PH; \*Neurons--physiology--PH;  
\*Sodium Channels--physiology--PH; \* **Sympathetic Nervous System** --physiology  
--PH; Action Potentials--drug effects--DE; Action Potentials--physiology  
--PH; Electrophysiology; Neurons--drug effects--DE; Neuropeptide Y  
--pharmacology--PD; Norepinephrine--pharmacology--PD; Oxotremorine  
--pharmacology--PD; Patch-Clamp Techniques; Rats; **Superior Cervical  
Ganglion** --cytology--CY; **Superior Cervical Ganglion** --drug effects--DE;  
**Sympathetic Nervous System** --cytology--CY; **Sympathetic Nervous System**  
--drug effects--DE

CAS Registry No.: 0 (Calcium Channels); 0 (Neuropeptide Y); 0  
(Sodium Channels); 51-41-2 (Norepinephrine); 70-22-4 (Oxotremorine)

19/8/20

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08601581 95360528 PMID: 7633893

**Evidence against a hemodynamic role for serotonin in the dorsal motor nucleus of the vagus.**

1995

Tags: Animal; Male; Support, U.S. Gov't, P.H.S.

Descriptors: Hemodynamics--drug effects--DE; \*Medulla Oblongata--drug  
effects--DE; \*Serotonin--pharmacology--PD; \* **Vagus Nerve** --drug effects--DE  
; Blood Pressure--drug effects--DE; Heart Rate--drug effects--DE; Medulla  
Oblongata--anatomy and histology--AH; Microinjections; Rats; Rats, Wistar;  
Regional Blood Flow--drug effects--DE; Reticular Formation--cytology--CY;  
Reticular Formation--physiology--PH; Serotonin--administration and dosage  
--AD; Solitary Nucleus--cytology--CY; Solitary Nucleus--physiology--PH;  
**Vagus Nerve** --anatomy and histology--AH

CAS Registry No.: 50-67-9 (Serotonin)

19/8/21

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08584126 95340948 PMID: 7615902

**Centrifugal gastric vagal afferent unit activities: another source of gastric "efferent" control.**

Apr 8 1995

Tags: Animal; In Vitro; Male; Support, U.S. Gov't, P.H.S.

Descriptors: Neurons, Afferent--physiology--PH; \*Neurons, Efferent  
--physiology--PH; \*Stomach--innervation--IR; \* **Vagus Nerve** --physiology--PH  
; Action Potentials--physiology--PH; **Axons** --physiology--PH;  
Electrophysiology; Esophagus--innervation--IR; Esophagus--physiology--PH;  
Mechanoreceptors--physiology--PH; Motor Neurons--physiology--PH; Nerve  
Endings--physiology--PH; Rats; Rats, Sprague-Dawley; Reflex--physiology--PH  
; **Vagus Nerve** --cytology--CY

19/8/22

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08570836 95329525 PMID: 7605835

[Stellate ganglion block with transcutaneous electric nerve stimulation (TENS): a double-blind study with healthy probands]

Blockade des Ganglion stellatum mit transkutaner elektrischer Nervenstimulation (TENS): Eine Doppelblindstudie an gesunden Probanden.

May 1995

Tags: Female; Human; Male

Descriptors: Autonomic Nerve Block--methods--MT; \* Stellate Ganglion --physiology--PH; \*Transcutaneous Electric Nerve Stimulation--methods--MT; Adult; Blood Flow Velocity--physiology--PH; Double-Blind Method; Forearm --blood supply--BS; Pain Threshold--physiology--PH; Reference Values; Reflex, Pupillary--physiology--PH; Skin--blood supply--BS; Skin Temperature --physiology--PH; Sweating--physiology--PH

19/8/23

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08383039 95146650 PMID: 7844242

**Sympathetic skin response.**

Sep 1994

Tags: Human

Descriptors: Arousal--physiology--PH; \*Galvanic Skin Response--physiology --PH; \*Skin--innervation--IR; \* Sympathetic Nervous System --physiopathology--PP; Axons --physiology--PH; Central Nervous System Diseases--diagnosis--DI; Central Nervous System Diseases--physiopathology --PP; Peripheral Nervous System Diseases--diagnosis--DI; Peripheral Nervous System Diseases--physiopathology--PP; Reference Values; Sweating --physiology--PH

19/8/24

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08086735 94224471 PMID: 8170680

**Effects of RLN and SLN stimulation on glottal area.**

Apr 1994

Tags: Animal; Support, Non-U.S. Gov't

Descriptors: Glottis--innervation--IR; \*Glottis--physiology--PH; \* Laryngeal Nerves --physiology--PH; \*Phonation--physiology--PH; \*Signal Processing, Computer-Assisted; Airway Resistance; Analysis of Variance; Dogs; Elasticity; Electric Stimulation; Evaluation Studies; Glottis --anatomy and histology--AH; Image Processing, Computer-Assisted; Multivariate Analysis; Pressure; Time Factors; Videotape Recording

19/8/25

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08062167 94195841 PMID: 8146200

**Functional dependence of Ca(2+)-activated K+ current on L- and N-type Ca2+ channels: differences between chicken sympathetic and parasympathetic neurons suggest different regulatory mechanisms.**

Mar 29 1994

Tags: Animal; Comparative Study; Support, U.S. Gov't, P.H.S.

Descriptors: Calcium Channels--physiology--PH; \* Ganglia, Parasympathetic --physiology--PH; \* Ganglia, Sympathetic --physiology--PH; \*Ion Channel Gating; \*Potassium Channels--physiology--PH; Calcium--metabolism--ME; Calcium Channel Blockers--pharmacology--PD; Calcium Channels--drug effects --DE; Cell Separation; Chick Embryo; Dihydropyridines--pharmacology--PD; Ganglia, Parasympathetic --drug effects--DE; Ganglia, Sympathetic --drug effects--DE; Neurons--drug effects--DE; Neurons--physiology--PH; Nifedipine--pharmacology--PD; Peptides--pharmacology--PD; Potassium

--metabolism--ME; Potassium Channels--drug effects--DE; omega-Conotoxin GVIA

CAS Registry No.: 0 (Calcium Channel Blockers); 0 (Calcium Channels);  
0 (Dihydropyridines); 0 (Peptides); 0 (Potassium Channels);  
21829-25-4 (Nifedipine); 7440-09-7 (Potassium); 7440-70-2 (Calcium);  
92078-76-7 (omega-Conotoxin GVIA)

19/8/26

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07954457 94089213 PMID: 8265188

**Function of the posterior cricoarytenoid muscle in phonation: in vivo laryngeal model.**

Dec 1993

Tags: Animal

Descriptors: \*Laryngeal Muscles--physiology--PH; \*Larynx--physiology--PH;  
\*Phonation--physiology--PH; Dogs; Electric Stimulation; Electrodiagnosis;  
Glottis--physiology--PH; Photography; Pressure; **Recurrent Laryngeal Nerve**  
--physiology--PH

19/8/27

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07613384 93128825 PMID: 8420465

**Laryngeal brain stem evoked response in the porcine model.**

Jan 1993

Tags: Animal; Support, Non-U.S. Gov't

Descriptors: \*Brain Stem--physiology--PH; \*Evoked Potentials; \*Larynx  
--physiology--PH; Electric Stimulation; **Laryngeal Nerves** --physiology--PH;  
Reaction Time; Reflex--physiology--PH; Swine

19/8/28

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07529376 93027582 PMID: 1383973

**Neurocardiac responses to vagoafferent electrostimulation in humans.**

Oct 1992

Tags: Female; Human; Male; Support, Non-U.S. Gov't

Descriptors: Electric Stimulation Therapy--instrumentation--IS;  
\*Epilepsy, Complex Partial--therapy--TH; \*Heart--innervation--IR; \*Heart  
Rate--physiology--PH; \*Prostheses and Implants; \* **Vagus Nerve** --physiology  
--PH; Adult; Electrocardiography--methods--MT; Signal Processing,  
Computer-Assisted

19/8/29

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07434786 92370381 PMID: 1504805

**Evoked responses from an in vitro slice preparation of a primary gustatory nucleus: the vagal lobe of goldfish.**

May 15 1992

Tags: Animal; In Vitro; Support, U.S. Gov't, Non-P.H.S.; Support, U.S.  
Gov't, P.H.S.

Descriptors: Brain Stem--physiology--PH; \*Goldfish--physiology--PH;  
\*Medulla Oblongata--physiology--PH; \*Taste--physiology--PH; \* **Vagus Nerve**  
--physiology--PH; Electric Stimulation; Evoked Potentials--physiology--PH;  
Nerve Fibers--physiology--PH; Synapses--physiology--PH

19/8/30

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07395327 92328468 PMID: 1626902

**Videostroboscopy of human vocal fold paralysis.**

Jul 1992

Tags: Human; Male

Descriptors: \*Laryngoscopy; \*Vocal Cord Paralysis--physiopathology--PP; Adult; Electrophysiology; Glottis--physiopathology--PP; **Laryngeal Nerves** --physiopathology--PP; Video Recording; Vocal Cords--physiopathology--PP

**19/8/31**

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07289060 92195914 PMID: 1372422

**Effect of vagal nerve electrostimulation on the power spectrum of heart rate variability in man.**

Feb 1992

Tags: Case Report; Human; Male; Support, Non-U.S. Gov't

Descriptors: **Autonomic Nervous System** --physiology--PH; \*Electric Stimulation Therapy; \*Epilepsy, Complex Partial--therapy--TH; \*Heart --innervation--IR; \*Heart Rate--physiology--PH; \* **Vagus Nerve** --physiology --PH; Adult; Circadian Rhythm--physiology--PH; Electrocardiography, Ambulatory; Epilepsy, Complex Partial--physiopathology--PP; Posture --physiology--PH; Signal Processing, Computer-Assisted

**19/8/32**

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06789830 91105478 PMID: 2271927

**Respiratory and cardiovascular effects of tetrodotoxin in urethane-anesthetized guinea pigs.**

Oct 1 1990

Tags: Animal

Descriptors: \*Cardiovascular System--drug effects--DE; \*Respiratory System--drug effects--DE; \*Tetrodotoxin--pharmacology--PD; Anesthesia, General; Electrodes, Implanted; Guinea Pigs; Oxygen--pharmacology--PD; Urethane; **Vagus Nerve** --physiology--PH

CAS Registry No.: 4368-2-9 (Tetrodotoxin); 51-79-6 (Urethane); 7782-44-7 (Oxygen)

**19/8/33**

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06627552 90329557 PMID: 2376008

**Preservation of integrative function in a perfused guinea pig brain.**

May 28 1990

Tags: Animal; Support, U.S. Gov't, P.H.S.

Descriptors: Brain--physiology--PH; \*Perfusion--methods--MT; \*Respiration --physiology--PH; \* **Vagus Nerve** --physiology--PH; Buffers; Electroencephalography; Guinea Pigs; Pentobarbital--pharmacology--PD; Respiration--drug effects--DE

CAS Registry No.: 0 (Buffers); 76-74-4 (Pentobarbital)

**19/8/34**

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06316658 90011279 PMID: 2452041

**Development of excitable membrane properties in mammalian sympathetic neurons.**

Sep 1989

Tags: Animal; Support, Non-U.S. Gov't; Support, U.S. Gov't, P.H.S.

Descriptors: **Ganglia**, Sympathetic --physiology--PH; \*Neurons--physiology --PH; Action Potentials; Animals, Newborn--physiology--PH; Cell Membrane --physiology--PH; Cells, Cultured; Electric Stimulation; Electrophysiology; Embryo--physiology--PH; **Ganglia**, **Sympathetic** --cytology--CY; Ion Channel Gating; Membrane Potentials; Neurons--ultrastructure--UL; Rats; Sodium

Channels--physiology--PH  
CAS Registry No.: 0 (Sodium Channels)

19/8/35

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06055261 89132809 PMID: 2916675

**Vagal stimulation decreases rate of left ventricular relaxation.**

Feb 1989

Tags: Animal; Support, Non-U.S. Gov't; Support, U.S. Gov't, P.H.S.

Descriptors: Myocardial Contraction; \* **Vagus Nerve** --physiology--PH; Dogs  
; Electric Stimulation; Heart Ventricle--physiology--PH; Kinetics; Time  
Factors

19/8/36

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05934152 89017316 PMID: 2459718

**A model of conduction through the N region of the AV node.**

1988

Tags: Human

Descriptors: \*Atrioventricular Node--physiopathology--PP; \*Computer  
Simulation; \*Electrocardiography; \*Heart Conduction System--physiopathology  
--PP; \*Models, Cardiovascular; Cardiac Complexes, Premature  
--physiopathology--PP; \*Heart Block--physiopathology--PP; **Vagus Nerve**  
--physiopathology--PP

19/8/37

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05778821 88201499 PMID: 3362009

**Photoelectric measurement of laryngeal paralyses correlated with videostroboscopy.**

May 1988

Tags: Animal; Male; Support, Non-U.S. Gov't; Support, U.S. Gov't,  
Non-P.H.S.

Descriptors: \*Otolaryngology--methods--MT; \*Vocal Cord Paralysis  
--physiopathology--PP; Dogs; Electric Stimulation; **Laryngeal Nerves**  
--physiopathology--PP; Light; Phonation; **Recurrent Laryngeal Nerve**  
--physiopathology--PP; Vocal Cord Paralysis--diagnosis--DI

19/8/38

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05774846 88195552 PMID: 3359867

**Newborn pain cries and vagal tone: parallel changes in response to circumcision.**

Apr 1988

Tags: Human; Male; Support, Non-U.S. Gov't; Support, U.S. Gov't, P.H.S.

Descriptors: Circumcision; \*Crying--physiology--PH; \*Infant, Newborn  
--physiology--PH; \*Pain--physiopathology--PP; \* **Vagus Nerve** --physiology  
--PH; Acoustics; Heart--physiopathology--PP; Stress--physiopathology--PP

19/8/39

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05505137 87256661 PMID: 3000140

**Laryngeal modeling: theoretical, in vitro, in vivo.**

Jul 1987

Tags: Animal; Human; Support, Non-U.S. Gov't; Support, U.S. Gov't,  
Non-P.H.S.

Descriptors: \*Larynx--physiology--PH; Dogs; Electrodiagnosis--methods--MT

; Models, Biological; Phenation; **Recurrent Laryngeal Nerve** --physiology  
--PH; Vocal Cords--physiology--PH

19/8/40

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05383777 87133916 PMID: 3816966

**Bradykinin inhibits a slow spike afterhyperpolarization in visceral sensory neurons.**

Dec 2 1986

Tags: Animal; In Vitro; Support, U.S. Gov't, P.H.S.

Descriptors: \*Bradykinin--pharmacology--PD; \*Neurons, Afferent --drug effects--DE; Action Potentials--drug effects--DE; Bradykinin--antagonists and inhibitors--AI; Indomethacin--pharmacology--PD; Membrane Potentials --drug effects--DE; **Nodose Ganglion** ; Rabbits

CAS Registry No.: 53-86-1 (Indomethacin); 58-82-2 (Bradykinin)

19/8/41

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05151807 86225912 PMID: 3711756

**Determination of the spatial and intensity properties of atrial repolarization potentials in the dog.**

Apr 1986

Tags: Animal; Support, U.S. Gov't, P.H.S.

Descriptors: \*Electrocardiography--methods--MT; \*Heart Atrium --physiopathology--PP; \*Heart Block--physiopathology--PP; Atrioventricular Node--physiopathology--PP; Cardiac Pacing, Artificial; Dogs; Heart Rate; **Vagus Nerve** --physiopathology--PP

19/8/42

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05054416 86139695 PMID: 2936713

**Evaluation of phasic blood flow velocity in the great cardiac vein by a laser Doppler method.**

Feb 1985

Tags: Animal; Support, Non-U.S. Gov't

Descriptors: \*Coronary Circulation; \*Coronary Vessels--physiology--PH; Blood Flow Velocity; Constriction; Coronary Circulation--drug effects--DE; Dipyridamole--pharmacology--PD; Dogs; Electric Stimulation; Fiber Optics --instrumentation--IS; Isoproterenol--pharmacology--PD; Lasers--diagnostic use--DU; Myocardial Contraction; Rheology; **Vagus Nerve** --physiology--PH

CAS Registry No.: 58-32-2 (Dipyridamole); 7683-59-2 (Isoproterenol)

19/8/43

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04783643 85167514 PMID: 3893488

**Verification of a model for the mechanisms controlling expiratory duration in rabbits under various conditions.**

Feb 1985

Tags: Animal

Descriptors: \*Rabbits--physiology--PH; \*Respiration; \*Respiratory Center --physiology--PH; Anesthesia, General; Electric Stimulation; Models, Biological; Neurons, Afferent--physiology--PH; Phrenic Nerve--physiology --PH; Respiration, Artificial; Time Factors; Vagotomy; **Vagus Nerve** --physiology--PH

19/8/44

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04669397 85048392 PMID: 6499636

**Physiological studies of small mediastinal ganglia in the cardiopulmonary nerves of dogs.**

Sep 1984

Tags: Animal; Female; Male; Support, Non-U.S. Gov't

Descriptors: **Ganglia**, Sympathetic --physiology--PH; \*Heart--innervation --IR; \*Lung--innervation--IR; Action Potentials; Chymotrypsin--pharmacology --PD; Dogs; Electric Stimulation; Manganese--pharmacology--PD

CAS Registry No.: 7439-96-5 (Manganese)

Enzyme No.: EC 3.4.21.1 (Chymotrypsin)

19/8/45

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04576387 84265777 PMID: 6086736

**Muscarinic agonists depress calcium-dependent gK in bullfrog sympathetic neurons.**

Apr 1984

Tags: Animal; Comparative Study; Support, Non-U.S. Gov't

Descriptors: Calcium--physiology--PH; \* **Ganglia**, **Sympathetic** --physiology --PH; \*Ion Channels--physiology--PH; \*Receptors, Muscarinic--physiology--PH ; Acetylcholine--pharmacology--PD; Action Potentials--drug effects--DE; Oxotremorine--pharmacology--PD; Rana catesbeiana; Scopolamine--pharmacology --PD; Synaptic Transmission--drug effects--DE; Tubocurarine--pharmacology --PD

CAS Registry No.: 0 (Ion Channels); 0 (Receptors, Muscarinic); 51-34-3 (Scopolamine); 51-34-3 (Acetylcholine); 57-95-4 (Tubocurarine); 70-22-4 (Oxotremorine); 7440-70-2 (Calcium)

19/8/46

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03986036 82282763 PMID: 6491378

**Transdermal transcutaneous electric nerve stimulation for pain: the search for an optimal waveform.**

1981

Tags: Human

Descriptors: Electric Stimulation Therapy--methods--MT; \*Pain, Intractable--therapy--TH; **Sympathetic Nervous System** --physiopathology --PP; **Axons** --physiology--PH; Evoked Potentials, Somatosensory; Models, Neurological; Nociceptors--physiopathology--PP; Pain, Intractable --physiopathology--PP; Retrospective Studies; Skin--innervation--IR; **Stellate Ganglion** --physiopathology--PP

19/8/47

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03980278 82248016 PMID: 6454549

**Transmission by presynaptic spike-like depolarization in the squid giant synapse.**

Apr 1982

Tags: Animal; In Vitro; Support, U.S. Gov't, P.H.S.

Descriptors: Neural Conduction; \* **Stellate Ganglion** --physiology--PH; \*Synapses--physiology--PH; Action Potentials; Electric Stimulation; Squid --physiology--PH

19/8/48

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03965911 82238913 PMID: 6491154

**Central integration of pulmonary stretch receptor input in the control of expiration.**

May 1982



Tags: Animal; In Vitro; Support, U.S. Gov't, Non-P.H.S.  
Descriptors: \*Lung--innervation--IR; \*Mechanoreceptors--physiology--PH;  
\*Respiration; \*Respiratory Center--physiology--PH; Action Potentials;  
Afferent Pathways--physiology--PH; Dogs; Feedback; Models, Neurological;  
**Vagus Nerve** --physiology--PH

19/8/49

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03572912 81126089 PMID: 7468282

**Investigation of the mastoid electrode contribution to the brain stem auditory evoked response.**

1980

Tags: Female; Human; Male; Support, Non-U.S. Gov't  
Descriptors: \*Brain Stem--physiology--PH; \*Evoked Potentials, Auditory;  
\*Mastoid--physiology--PH; Acoustic Stimulation; Adult; Auditory Diseases,  
Central--diagnosis--DI; Cranial Nerves--physiology--PH; Ear--physiology--PH  
; Electrodes; **Laryngeal Nerves** --physiology--PH; Middle Age; Neural  
Conduction; Vestibulocochlear Nerve--physiology--PH

19/8/50

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03554410 .81110194.. PMID: 7458181

**Invasive electrophysiological study in the Jervell and Lange-Nielsen syndrome.**

Feb 1981

Tags: Case Report; Human; Male  
Descriptors: \*Arrhythmia--physiopathology--PP; \*Deafness--congenital--CN;  
\*Syncope--physiopathology--PP; Arrhythmia--surgery--SU; Autonomic Nerve  
Block; Child; Electrocardiography; Heart--physiopathology--PP; **Stellate  
Ganglion** --surgery--SU; Sympathectomy; Syncope--surgery--SU; Syndrome

19/8/51

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03026886 79092959 PMID: 732500

**Evoked electromyographic test applied for recurrent laryngeal nerve paralysis.**

Dec 1978

Tags: Case Report; Human; Male  
Descriptors: \*Vocal Cord Paralysis--diagnosis--DI; Adult; Electric  
Stimulation; Electromyography; Evaluation Studies; Evoked Potentials;  
Hoarseness--diagnosis--DI; Middle Age; Recurrence; **Recurrent Laryngeal  
Nerve** --physiopathology--PP

19/8/52

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02912494 78233054 PMID: 777811

**Responses of feline esophagus to cervical vagal stimulation.**

Jul 1978

Tags: Animal; In Vitro; Support, U.S. Gov't, P.H.S.  
Descriptors: Esophagus--innervation--IR; \* **Vagus Nerve** --physiology--PH;  
Atropine--pharmacology--PD; Cats; Electric Stimulation; Esophagus  
--physiology--PH; Manometry; Muscle Contraction--drug effects--DE; Muscle,  
Smooth--physiology--PH; Muscles--physiology--PH; Neuromuscular Junction;  
Pressure; Succinylcholine--pharmacology--PD  
CAS Registry No.: 306-46 (Succinylcholine); 51-55-8 (Atropine)

19/8/53

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02275756 76110965 PMID: 1241352

**Cardiac arrhythmias in acute central nervous system disease. Successful management with stellate ganglion block.**

Feb 1976

Tags: Case Report; Female; Human

Descriptors: \*Intracranial Aneurysm--complications--CO; \*Lidocaine  
--therapeutic use--TU; \*Nerve Block; \*Tachycardia--etiology--ET; Basilar  
Artery; Cerebral Hemorrhage--etiology--ET; Electrocardiography;  
Intracranial Aneurysm--congenital--CN; Middle Age; **Stellate Ganglion** ;  
Tachycardia--drug therapy--DT; Tachycardia--physiopathology--PP  
CAS Registry No.: 137-58-9 (Lidocaine)